

# EXHIBIT A

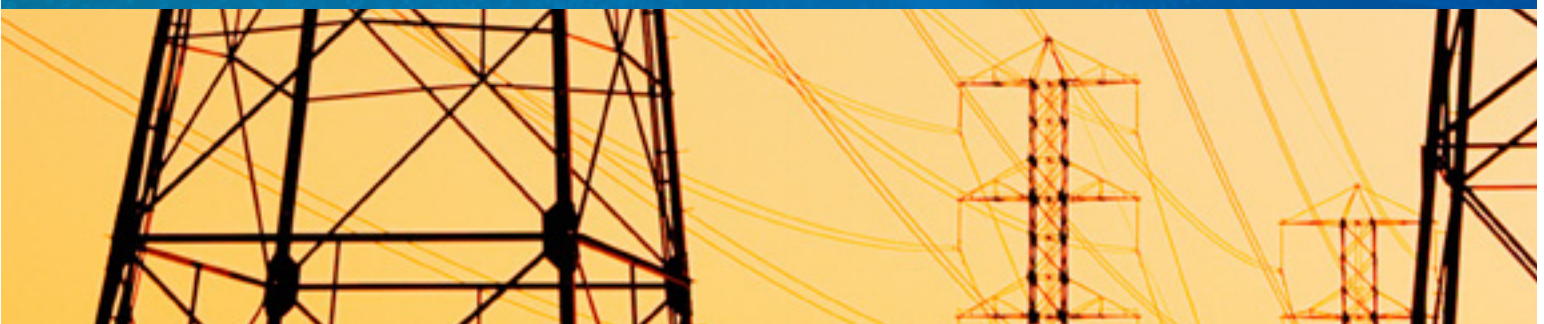




Partnership Committee Report

# Puerto Rico Public-Private Partnership for the Electric Power Transmission and Distribution System

May 15, 2020







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# 1. Executive Summary





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On May 15, 2020, after a robust and competitive procurement process that lasted more than 18 months, the Partnership Committee (the "**Partnership Committee**") established by the Puerto Rico Public-Private Partnership Authority (the "**P3 Authority**") pursuant to Section 5 of the Puerto Rico Electric System Transformation Act, Act No. 120-2018, as amended ("**Act 120**"), determined to recommend to the board of directors of the P3 Authority (the "**P3 Authority Board**") that the contract for the management, operation, maintenance, repair, restoration, and replacement of the Puerto Rico electric power transmission and distribution system (the "**Project**") be awarded to a consortium composed of:



**ATCO Ltd.** (TSX:ACO.X) ("**ATCO**"), a diversified global corporation with 6,000 employees and \$17 billion in assets. ATCO (i) operates electric transmission and distribution ("**T&D**") systems, natural gas T&D utilities, and a rapidly growing competitive retail energy business, (ii) provides electricity and natural gas utility services to more than two million customers in Canada and Australia, along with fit-for-purpose, low-carbon, behind-the-fence energy solutions for industry and municipalities, and (iii) owns and operates in Alberta, Canada more than 54,000 miles of T&D lines, delivering electricity in a sprawling service territory covering 165,000 square miles;

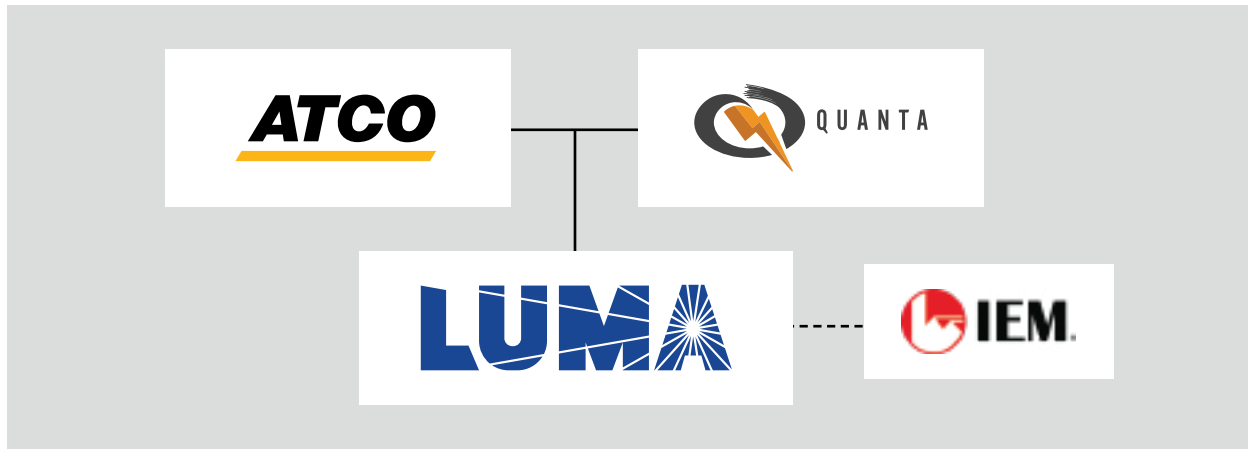


**Quanta Services Inc.** (NYSE:PWR) ("**Quanta**"), the leading infrastructure solutions provider for the electric power industry in North America. With over 46,000 employees and approximately \$12 billion in annual revenues, Quanta is a U.S. Fortune 500 corporation listed on the NYSE (PWR). Quanta also serves the pipeline, industrial, and telecommunications industries; and



**Innovative Emergency Management, Inc.** ("**IEM**"), a comprehensive emergency management and disaster recovery firm that has supported over 300 state and local jurisdictions with a wide range of emergency management services, including (i) obtaining, managing, and retaining federal funds and (ii) implementing disaster recovery programs funded by federal, state, and local sources. IEM has overseen over \$51 billion in disaster recovery programs and has managed the most recent U.S. disasters: hurricane Harvey in Texas; hurricanes Irma, Matthew, and Hermine in Florida; hurricane Matthew in North Carolina; hurricane Sandy in New Jersey and New York; and the severe floods of 2016 in Louisiana.





The ATCO/Quanta/IEM consortium<sup>1</sup>, which has been incorporated as LUMA Energy ("**LUMA**"), combines (i) industry-leading experience in building reliable and sustainable infrastructure and skilled workforce training (through Quanta), (ii) a proven track record in operating several world-class utility businesses that deliver safe, reliable, and affordable energy to millions of customers (through ATCO), and (iii) expertise in obtaining, managing, and retaining federal funds (through IEM). LUMA is uniquely equipped to reinvigorate Puerto Rico's electricity T&D system (the "**T&D System**"), ushering in both a clean and resilient energy future for the people of Puerto Rico, and rapid disaster and emergency response expertise to ensure the safety of the people of Puerto Rico.

The Partnership Committee's decision marks an important milestone in the implementation of the Government of Puerto Rico's (the "**Government's**") objective of providing modern, affordable, resilient, and reliable power, which will serve as a driver of economic growth in Puerto Rico following the

destruction wrought by hurricane Irma ("**Irma**") and hurricane Maria ("**Maria**") in September 2017 and the earthquakes of December 2019 and January 2020.<sup>2</sup>



Satellite image of Maria over Puerto Rico.

Prior to the impact of Irma and Maria, Puerto Rico already suffered from inherently deficient energy infrastructure. In particular, the planning, design, and operation of an isolated (not interconnected) island-based electricity system imposes on the Puerto Rico Electric Power Authority ("**PREPA**" or the "**Owner**"), and Puerto Rico as a whole,

<sup>1</sup> ATCO and Quanta are long-time partners with a proven track record of performance. In 2017, the two companies partnered on a project to design, build, own, operate, and finance approximately 310 miles of 500 kV transmission line and associated facilities running from Wabamun, a village located 42 miles west of Edmonton, Alberta, to Fort McMurray, a municipality located in Northeastern Alberta (the "**Fort McMurray Project**"). Valued at \$1.6 billion, the Fort McMurray Project is the largest public-private partnership ("**PPP**") contract in Canadian history. ATCO and Quanta's inclusive and respectful approach towards local communities and the quality of design, procurement, and construction plans were key to the success of the Fort McMurray Project. In addition, the strength of the two companies' leadership and experience in designing, building, operating, and maintaining regulated utility transmission systems, and their ability to define and manage the project's risks resulted in reduced costs to customers. Because of ATCO and Quanta's close collaboration throughout the execution of the project and their effective work with regulators, their team was able to complete the Fort McMurray Project three months ahead of schedule, with an impeccable safety record and no opposition from local communities or non-governmental organizations.

<sup>2</sup> Between December 28, 2019, and mid-April 2020, more than 2,000 earthquakes have hit the island of Puerto Rico, of which 30 were of a magnitude above 4.5 and five of a magnitude above 5.5.



significant challenges with respect to power system stability<sup>3</sup> and reliability. In addition, the T&D System, which interconnects PREPA's power plants with major switching and load centers throughout Puerto Rico, faced major challenges, including a significant lag in technological upgrades, an aging and deteriorated system, high vulnerability to weather conditions, inconsistent customer support and collections operations, and limited access to capital markets.

Moreover, Puerto Rico and PREPA were burdened with significant debt obligations, which further limited PREPA's ability to invest in Puerto Rico's energy transmission infrastructure. On May 3, 2017 and July 3, 2017, the Financial Oversight and Management Board for Puerto Rico (the "**FOMB**") filed petitions for relief under Title III ("**Title III**") of the Puerto Rico Oversight, Management, and Economic Stability Act ("**PROMESA**") for Puerto Rico and PREPA, respectively. PREPA commenced the in-court debt restructuring process just before Irma and Maria struck Puerto Rico.

The damage caused by Irma and Maria exacerbated PREPA's challenges and created new ones. Additionally, the damage to PREPA's power station in Costa Sur (the "**Costa Sur Power Station**") as a result of the earthquakes in December 2019 and January 2020 significantly worsened the situation. PREPA recently indicated that extensive work over a long period of time will be required to restore the T&D System and the 47-year-old natural gas-fired Costa Sur Power Station to acceptable conditions.

In the face of these unprecedented challenges, the Government sought not only to rebuild after Irma and Maria and restructure PREPA's legacy debt obligations, but also to use the recovery process to both jumpstart a long-term revitalization of the Puerto Rican economy and upgrade Puerto Rico's electric system to be more resilient against future natural disasters. In the months

following Irma and Maria, the Government spent substantial time and resources to bolster the legal framework for PPPs in the electric sector in order to attract and harness private sector creativity and resources, with a view towards fully delivering on the economic, infrastructure, and societal goals identified by the Government. In June 2018, the P3 Authority launched the procurement process for the Project as part of the Government's mission to transform Puerto Rico's electric system into a modern, sustainable, reliable, efficient, cost-effective, and resilient system.

On October 31, 2018, the P3 Authority issued the Request for Qualifications (the "**RFQ**") for the Project. On December 5, 2018, five private sector parties (including the ATCO/Quanta/IEM consortium or LUMA) interested in the Project (each, a "**Respondent**") submitted Statements of Qualifications ("**SOQs**") in response to the RFQ. Section 9(d) of the Public-Private Partnership Authority Act, Act No. 29-2009, as amended ("**Act 29**"), addresses consortia, a prevalent structure in the PPP market, and provides that parties wishing to participate in the procurement process for a PPP may present their proposals jointly as a consortium in order to bring to bear the skills and expertise of each of the consortium members.

On January 17, 2019, the Partnership Committee selected four experienced and reputable Respondents in the qualification process conducted pursuant to the RFQ (the "**RFQ Process**") to participate in the next phase of the process: (i) Duke Energy Corporation ("**Duke**"); (ii) Exelon Corporation ("**Exelon**"); (iii) LUMA; and (iv) Public Service Enterprise Group Incorporated ("**PSEG**"). On February 1, 2019, the P3 Authority issued the Request for Proposals (the "**RFP**") for the Project. On November 25, 2019, two participants (each, a "**Proponent**") in the procurement process conducted pursuant to the RFP (the "**RFP Process**"), LUMA and PSEG (or the "**Other Proponent**"), submitted

<sup>3</sup> Power system stability refers to the ability of (i) the power generation plants and the electrical transmission and distribution system load to remain in balance during normal conditions and (ii) the power system to respond quickly to, and return to its normal state after, a power system disturbance. The power system design for island utilities must take into account the lack of interconnection to other utilities. Otherwise, the power system will not be inherently stable and will suffer from load sheds and outages.



proposals (each such proposal as supplemented and modified in writing, a “**Definitive Proposal**”) in response to the RFP.

The RFP required that each Proponent submit a Definitive Proposal including the following three key elements:

1

a technical proposal (the “**Technical Proposal**”) reflecting (i) each Proponent’s approach to performing the services (the “**O&M Services**”) under the long-term operation and maintenance agreement with PREPA for the Project (the “**O&M Agreement**”), (ii) each Proponent’s proposed plan to transition the T&D System from PREPA to the winning Proponent (the “**Operator**”) consistent with the terms of the O&M Agreement (the “**Front-End Transition Plan**”), (iii) each Proponent’s proposed plan for staffing and training employees and subcontracting certain services (the “**Operator Recruitment and Staffing Plan**”), and (iv) each Proponent’s approach to the customer service, technical, and operational and financial performance metrics to improve the T&D System (the “**Performance Metrics**”);

2

an operational and financial proposal (the “**Operational and Financial Proposal**”) reflecting certain operational and financial terms and conditions proposed by each Proponent to be included in the O&M Agreement, including (i) the annual fixed fee payable by PREPA to the Operator for providing the O&M Services (the “**Fixed Fee**”) and the annual variable fee payable by the Owner to the Operator based on the Operator’s ability to meet or exceed the Performance Metrics (the “**Incentive Fee**,” and together with the Fixed Fee, the “**Service Fee**”), (ii) an estimate of the cost for the Operator to provide the services to transition the T&D System from PREPA to the Operator (the “**Front-End Transition Service Fee**”) during the period between execution of the O&M Agreement and the Operator’s assumption of operational control of the T&D System (the “**Front-End Transition Period**”), (iii) an estimate of the cost for the Operator to provide the services to transition the T&D System from the Operator to PREPA or the Government (the “**Back-End Transition Service Fee**”) upon the expiration or early termination of the term of the O&M Agreement (the “**Contract Term**”), and (iv) the dollar value of certain caps on liability; and

3

a legal proposal (the “**Legal Proposal**”) consisting of a markup of the proposed form of O&M Agreement for the Project.

The Partnership Committee recommended to the P3 Authority Board that LUMA be awarded the Project based on the fact that of the two Definitive Proposals submitted in response to the RFP, LUMA’s contained the more favorable terms to the Government and the people of Puerto Rico with respect to each of its Technical, Operational and Financial, and Legal Proposals.

LUMA’s Technical Proposal presented a tailored approach to the O&M Services for the T&D System, which demonstrated a strong understanding of the PREPA context. Among other things, LUMA provided a comprehensive Front-End Transition Plan and Operator Recruitment and Staffing Plan, as well as an in-depth approach to federal funding procurement, management, and proper deployment. In addition, LUMA essentially



accepted the Government's approach to the Performance Metrics included in the RFP, which were designed to ensure that the Operator achieves certain benchmark standards of performance in respect of the T&D System for the benefit of its customers and the people of Puerto Rico. Finally, LUMA demonstrated a unique commitment to (i) training and knowledge transfer, as evidenced by LUMA's commitment to build and manage, at its cost and expense, a lineworkers college in Puerto Rico (the "**Lineworkers College**")<sup>4</sup>, and (ii) helping PREPA become a self-sustaining standalone utility by the end of the Contract Term, thereby reducing the need for successive operation and maintenance contracts at the end of the term.

LUMA's Operational and Financial Proposal included a Fixed Fee and an Incentive Fee with a net present value over the Contract Term close to \$30 million lower than that of the Other Proponent. In addition, LUMA's Operational and Financial Proposal included higher liability caps and liquidated damage payments than the Other Proponents in the event of performance failures by the Operator, which demonstrated a greater willingness by LUMA to stand behind its contractual

commitments and to protect the interest of PREPA's customers and the citizens of Puerto Rico.

Finally, from a legal and contractual perspective, LUMA agreed to a form of the O&M Agreement that was closer to the one prepared by the P3 Authority and included in the RFP. In effect, LUMA accepted, without significant change, the key elements of the O&M Agreement and required many fewer material changes to the document, thus resulting in less risk and cost transfer from the Operator to the Government.

In view of all of the above, the Partnership Committee believes that the Definitive Proposal submitted by LUMA (i) reflects the more thorough, detailed, and tailored approach to each of the technical, operational and financial, and legal components of the RFP, (ii) presents the better path forward to achieving the Government's objective of transforming PREPA's aged and inefficient T&D System into one that is safe, customer-centric, affordable, reliable, resilient, and sustainable, and (iii) is the better option for the people of Puerto Rico.



*PREPA technical staff repair a transmission line, Cayey, PR.*

<sup>4</sup> Personnel across Quanta's business lines receive the highest level of training at the Quanta Advanced Training Center on a 2,300-acre ranch transformed into a state-of-the-art training facility in La Grange, Texas, and at the Northwest Lineman College, the Quanta-owned accredited college that specializes in developing electric power, gas distribution, and telecommunications service skills, and trains more than 9,000 technical field workers per year at four campuses across the U.S.

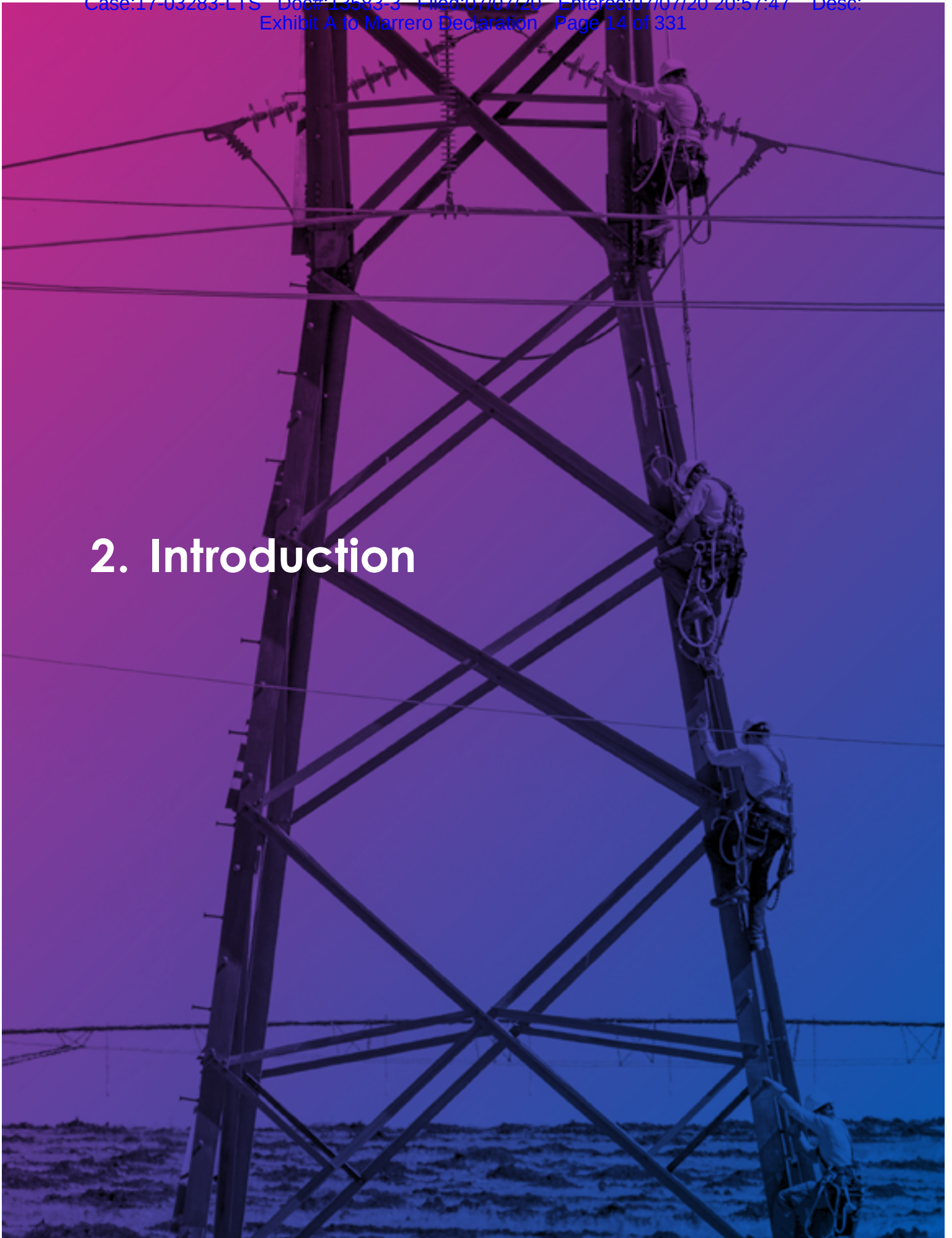




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## 2. Introduction







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As required by law, this Partnership Committee Report (the "**Report**") has been prepared pursuant to:

- Section 8(b)(vii) and Section 9(g)(i) of Act 29;
- Section 5 and Section 10 of Act 120; and
- Section 8.1 of the Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Partnership Contracts and Sale Contracts for the Transformation of the Electric System under Act No. 120-2018, as amended (the "**Regulation**").

Except as provided in Exhibit A hereto (*Defined Terms*), capitalized terms used but not otherwise defined in this Report have the meaning ascribed to them in, as applicable, Act 29, Act 120, the Regulation or the RFQ issued by the P3 Authority on October 31, 2018.

Pursuant to Section 5 of Act 120 and Resolution No. 2018-55 of the P3 Authority Board, as amended, on August 1, 2018, the P3 Authority established the Partnership Committee responsible for the procurement of a PPP with PREPA for the management, operation, maintenance, repair, restoration, and replacement of the T&D System.

This Report has been prepared in accordance with the Partnership Committee's recommendation to the P3 Authority Board that the Project be awarded to LUMA, a consortium formed by (i) ATCO, a Canadian based global operator of leading electric T&D systems, natural gas T&D utilities, and a rapidly growing competitive retail energy business with approximately \$17 billion in assets, (ii) Quanta, a U.S. Fortune 500 corporation with approximately \$12 billion in annual revenue and the leading infrastructure solutions provider for the electric power industry in North America, and (iii) IEM, a comprehensive emergency management and disaster recovery firm that has supported over 300 state and local jurisdictions with a wide range of emergency management

services and overseen over \$51 billion in disaster recovery programs.

On May 15, 2020, following a process of more than 18 months, the Partnership Committee voted unanimously to recommend to the P3 Authority Board that LUMA be selected to execute the O&M Agreement for the Project. As required by Section 9(g) of Act 29, the Partnership Committee has prepared this Report to describe the procedures followed in the procurement process for the award of the O&M Agreement and the reasons for its decision. In particular, this Report describes, pursuant to Section 9(g) of Act 29, the following considerations:

the public policy, social welfare, and economic development objectives the P3 Authority seeks to address through the implementation of the Project;

the process leading to the recommended award of the O&M Agreement, including the RFQ Process, the RFP Process, and the evaluation of Definitive Proposals;

the Partnership Committee's selection of LUMA as the Preferred Proponent to engage in exclusive discussions and negotiations with the P3 Authority in connection with the Project (the "**Preferred Proponent**");

the determination that LUMA's Definitive Proposal is the most advantageous to the Government and the people of Puerto Rico following such exclusive negotiations;

the Partnership Committee's rationale for recommending to the P3 Authority Board that the O&M Agreement be awarded to the LUMA (the "**Recommended Award**"); and

the core elements and key provisions of the O&M Agreement.



Act 29 provides the Partnership Committee with the authority to negotiate the terms of the O&M Agreement and PREPA with the authority to execute the O&M Agreement negotiated by the Partnership Committee with the Preferred Proponent, subject to (i) the approval of the Puerto Rico Energy Bureau ("**PREB**") created by Act 57-2014, as amended, to regulate, monitor, and enforce the energy public policy of the Government, (ii) the approval of the P3 Authority Board and the board of directors of PREPA, and (iii) the approval of the Governor of Puerto Rico or her delegate, in each case pursuant to the Regulation (the approvals described in clauses (i) though (iii) together, the "**Required Approvals**").

In addition, PREPA's authority to execute the O&M Agreement negotiated by the Partnership Committee with the Preferred Proponent is subject to the consent of the FOMB ("**FOMB Consent**") pursuant to the FOMB's contract review policy established pursuant to Section 204(b)(2) of PROMESA, which requires FOMB approval of all local Puerto Rico contracts with an expected value of \$10 million or more in the aggregate.

Accordingly, the O&M Agreement has been submitted to the relevant entities for the Required Approvals and to the FOMB for review and consent.

Upon receipt of the Required Approvals and the FOMB Consent, as well as the execution of the O&M Agreement, this Report will be (i) filed with the Office of the Clerk of the House of Representatives and of the Senate of the Legislative Assembly of the Commonwealth of Puerto Rico (the "**Legislature**") and (ii) published on the P3 Authority's website at: [www.p3.pr.gov](http://www.p3.pr.gov). Pursuant to Section 9(j) of Act 29, this Report, together with a final executed copy of the O&M Agreement, will also be (i) published on the Government's website at [www.aafaf.pr.gov](http://www.aafaf.pr.gov), and (ii) announced in a newspaper of general circulation with information on where to locate a copy of this Report.

Throughout the procurement process for the Project, the P3 Authority and the Partnership Committee have received advice from various consultants to the P3 Authority, the Puerto Rico Fiscal Agency and Financial Advisory Authority (known by its Spanish acronym "**AAFAF**"), PREPA, and the FOMB (the "**Consultants**").<sup>5</sup> In addition, the FOMB has been actively involved in each stage of the procurement process through the participation of its Director of Infrastructure and/or its financial Consultants (together, the "**FOMB Representatives**"), and in all meetings and other interactions with Proponents.

This Report has been prepared by the Partnership Committee and is divided into five main sections:

- this introduction;
- a summary of the Project background and objectives;
- a summary of the procurement process;
- a summary of the selection process and key considerations relevant to the Recommended Award; and
- a conclusion.

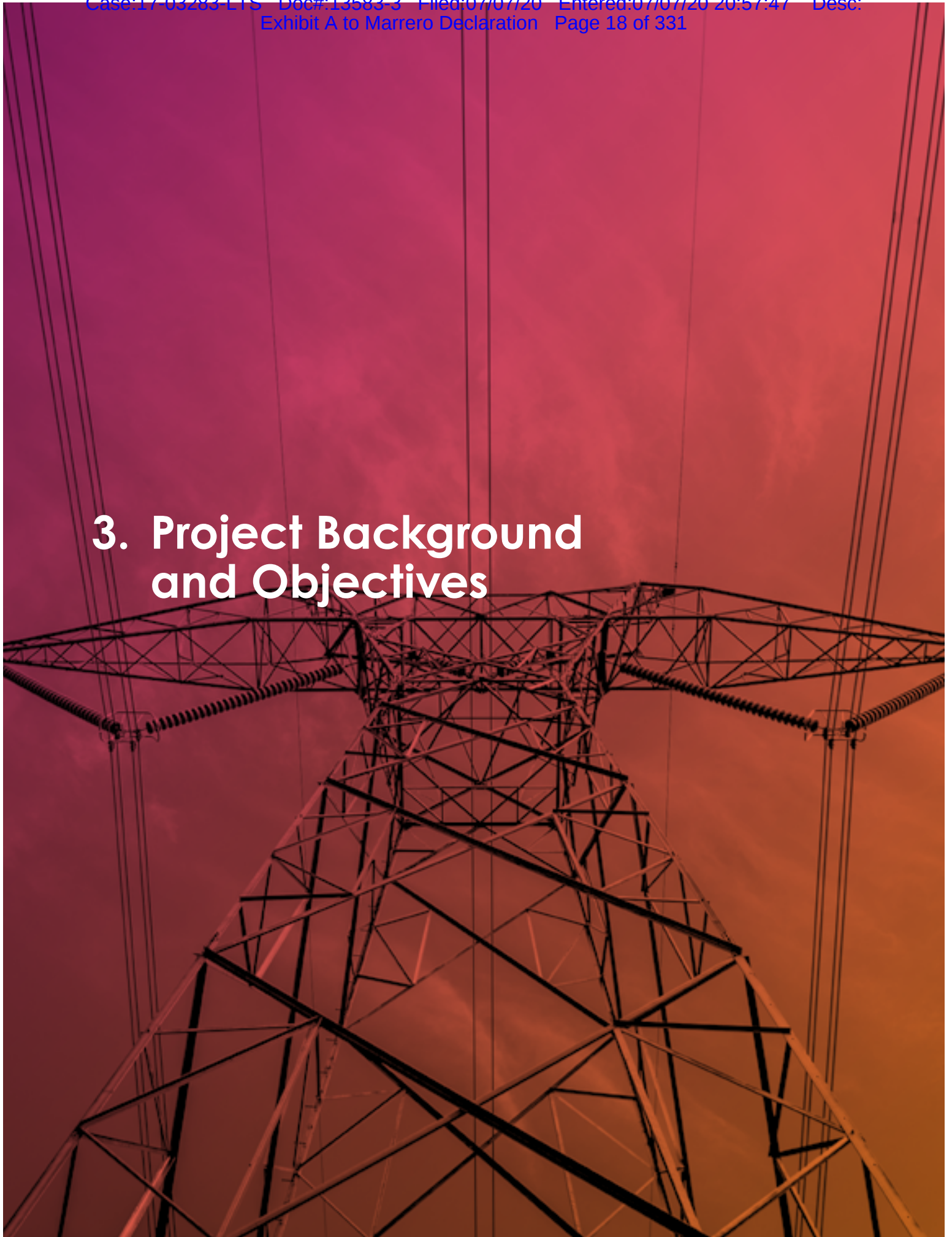


*General view of transmission towers near the Central Costa Sur power plant, Guayanilla, PR.*

<sup>5</sup> Cleary, Gottlieb, Steen & Hamilton LLP ("**Cleary**"), Pietrantonio Mendez & Alvarez LLC ("**PMA**"), FTI Consulting, Inc. ("**FTI**," and together with Cleary and PMA, the "**P3 Consultants**"), CPM P.R. LLC ("**CPM**") and Baker, Donelson, Bearman, Caldwell & Berkowitz, PC ("**Baker Donelson**") were Consultants to the P3 Authority. Cleary and PMA provided legal advice, FTI provided technical and certain financial advice. CPM provided advice in the procurement process. Baker Donelson provided advice on matters related to federal funding. Citigroup Global Markets Inc. ("**Citigroup**") and Nixon Peabody LLP ("**Nixon**") were Consultants to the FOMB and participated in the Project on behalf of the FOMB. Citigroup provided financial advice. Nixon provided advice on tax-related matters, including with respect to ensuring that the O&M Agreement is a qualified management agreement. Ankura Consulting Group, LLC was a Consultant to PREPA and AAFAF, and provided certain technical and financial advice related to the T&D System and compliance with the fiscal plan. Finally, certain other Consultants provided advice from time to time on various specific elements of the Project.



### 3. Project Background and Objectives







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## 3.1 Project Background

### 3.1.1 PREPA and the T&D System

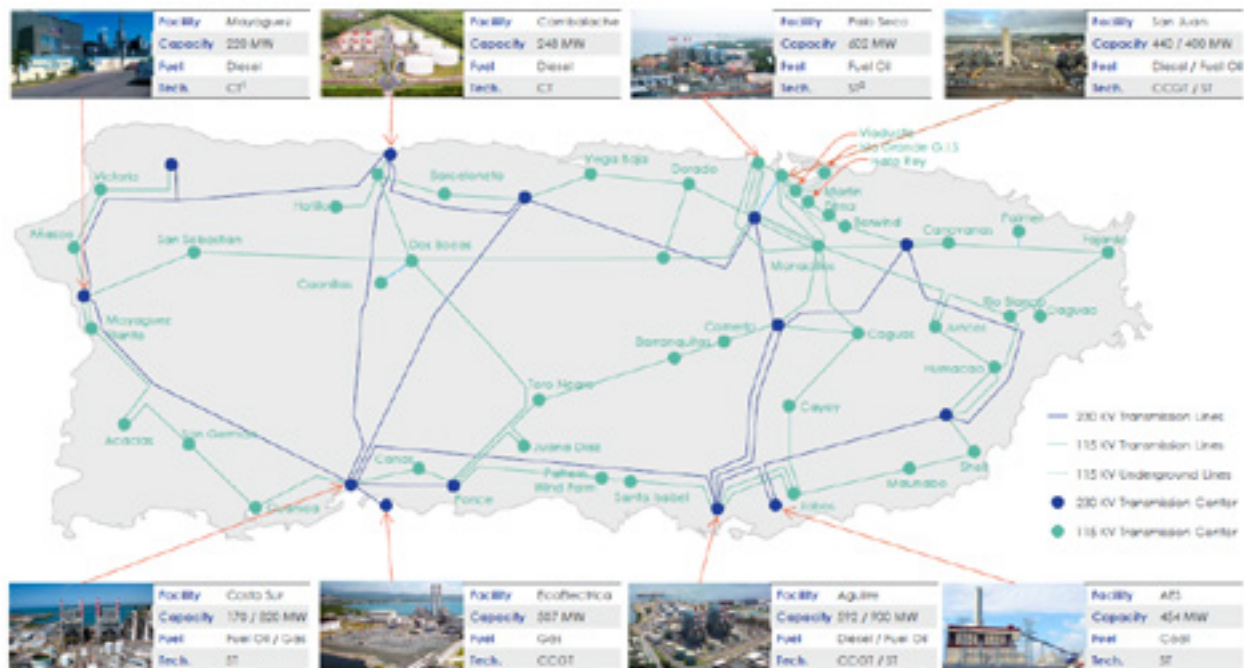
PREPA is a public corporation and instrumentality of the Government, created pursuant to the PREPA Enabling Act, Act No. 83-1941, as amended. Its purpose is to provide electric power in a reliable manner, contribute to the general welfare and the sustainable development of Puerto Rico, and maximize the benefits while minimizing the social, environmental, and economic impacts of electric energy generation and distribution. As the sole electric utility in Puerto Rico, PREPA provides electricity to approximately 1.5 million customers, making it one of the largest U.S. public utilities by customers served.

The T&D System interconnects PREPA's power plants with major switching and load centers throughout Puerto Rico. The T&D System currently has 1,113.5 miles of transmission lines (230 kV and 115 kV), 1,376

miles of sub-transmission lines (38 kV), and 16,035 miles of primary distribution lines (13.2 kV through 4.16 kV). The T&D System includes 47 transmission centers, 339 sub-transmission substations, and 613 privately-owned substations.<sup>6</sup>

PREPA's current priorities are focused on improving safe and reliable electric service, reducing energy costs, promoting smart energy consumption, and protecting the environment. Strategies to achieve these objectives include:

- reducing operating expenses;
- increasing efficiency;
- minimizing energy theft;
- diversifying energy sources;
- establishing smart grid technologies for energy control and consumption monitoring; and
- maximizing the use of advanced technology.



PREPA T&D and generation assets.

<sup>6</sup> The data relating to the number of miles of transmission lines, sub-transmission lines, distribution lines, and publicly-owned transmission centers and sub-transmission substations is from Sargent & Lundy's April 4, 2020, *PREPA Transmission and Distribution System Useful Life Assessment* prepared for PREPA.



### 3.1.2 Recent Challenges

PREPA has faced a number of significant challenges in recent years, including:

- a lack of managerial continuity, notably five people filling the role of executive director in three years;
- a dated electrical system that is in poor condition due, in part, to substandard practices and chronic infrastructure underinvestment;
- significant leverage, which has led, among other things, to an inability to access credit markets for long term capital investment; and

- a geographic mismatch between supply and demand — much of the generation is located in the South of the island while a majority of the demand is in the North, exacerbating the fragility and instability of the whole system.

Puerto Rico's dated and fragile electric system has faced significant operational and reliability challenges and has struggled to provide residents with reliable and affordable power, as evidenced by reliability, customer satisfaction, and safety metrics that stand well below U.S. mainland and other island utility industry standards. PREPA's record of performance with respect to such metrics during the period from 2015 to 2018 is described in more detail below.

**Reliability** – Reliability metrics not only measure the overall health of an electric system, but also help guide an understanding of the parts of an electric system that require investment in order to ensure public and employee safety and keep the power on. The utility industry employs a series of metrics to measure and monitor reliability, including (i) the system average interruption duration index, which measures the average time a customer experiences interruptions per year, (ii) the system average interruption frequency index, which measures the average number of power interruptions per year, and (iii) the customer average interruption duration index ("CAIDI"), which measures the average length of power interruptions. PREPA has historically significantly underperformed in each of these categories compared to the industry. For example, for the four-year period from 2015 to 2018, PREPA's average CAIDI measure was 165.8 minutes compared to the industry benchmark of 112 minutes. A central goal of the Project is to provide the people of Puerto Rico with a more reliable T&D System (i.e., fewer outages, shorter outages, and higher resilience to major weather events).

**Customer Satisfaction** – To measure customer satisfaction, utilities collect call center operational metrics and also engage independent third parties to survey customers. For the four-year period from 2015 to 2018, PREPA's average speed to answer customer calls was 13 minutes while the industry benchmark was less than one minute. In addition, while U.S. mainland utilities typically use metrics developed and applied by independent third-party experts to measure customer satisfaction, such as the J.D. Power or American Customer Satisfaction Index, PREPA does not currently do so. As part of the transformation effort for the Project, the winning Proponent will be required to measure customer satisfaction through an independent third party, bringing PREPA in line with industry practice, and develop additional rigor around call center data collection.



**Safety** – As a service provider for the people of Puerto Rico and an employer of approximately 6,000 workers, safety is a critical metric for ensuring public and employee safety and measuring PREPA's success. Strict adherence to the rules and regulations set forth by the Puerto Rico Occupational Safety and Health Administration ("OSHA") is required, including those requiring utilities to report the following metrics, among others: (i) the number of safety-related incidents scaled to workforce size ("**Safety-Related Incidents**"); (ii) the number of lost work days due to safety incidents scaled to workforce size ("**Lost Time Cases**"); and (iii) the number of employment-related deaths ("**Number of Deaths**"). For the four-year period from 2015 to 2018, PREPA's Safety-Related Incidents averaged 14.4 incidents per year while the industry benchmark was 1.2 incidents per year. Through the transformation of the T&D System, the Government seeks to bring Safety-Related Incidents, Lost Time Cases, and Number of Deaths in line with industry standards. Although PREPA must comply with OSHA safety regulations and reporting requirements, it is even more critical to foster a utility culture committed to safety, which the Government seeks to achieve through the transformation.

Table 1 sets out PREPA's record of performance with respect to reliability, customer satisfaction, and safety metrics during the period from 2015 to 2018 as compared with that of U.S. mainland and other island utility industry benchmarks.

**TABLE 1: RELIABILITY, CUSTOMER SATISFACTION, AND SAFETY METRICS**

#	Metric	PREPA*	Industry Benchmark**	% Worse
1	<b>CAIDI:</b> customer average interruption duration index measure (reliability metric)	165.8 minutes	112 minutes	48%
2	<b>SAIFI:</b> system average interruption frequency index (reliability metric)	4.5 interruptions	0.98 interruptions	359%
3	<b>SAIDI:</b> system average interruption duration index (reliability metric)	732 minutes	109 minutes	572%
4	<b>Speed to Answer:</b> average speed to answer customer calls (customer satisfaction metric)	13.0 minutes	<1 minute	1,200%
5	<b>Safety-Related Incidents:</b> average number of safety-related incidents per year scaled to workforce size (safety metric)	14.4 incidents	1.2 incidents	1,100%
6	<b>Lost Time Cases:</b> average number of safety-related incidents that result in lost workdays per year scaled to workforce size (safety metric)	10.3 incidents	0.4 incidents	2,475%

\* PREPA's operating statistics represent averages for 2015 to 2018 and were provided by PREPA to Sargent & Lundy to be included in Sargent & Lundy's May 3, 2020 T&D Performance Metrics Report for PREPA.

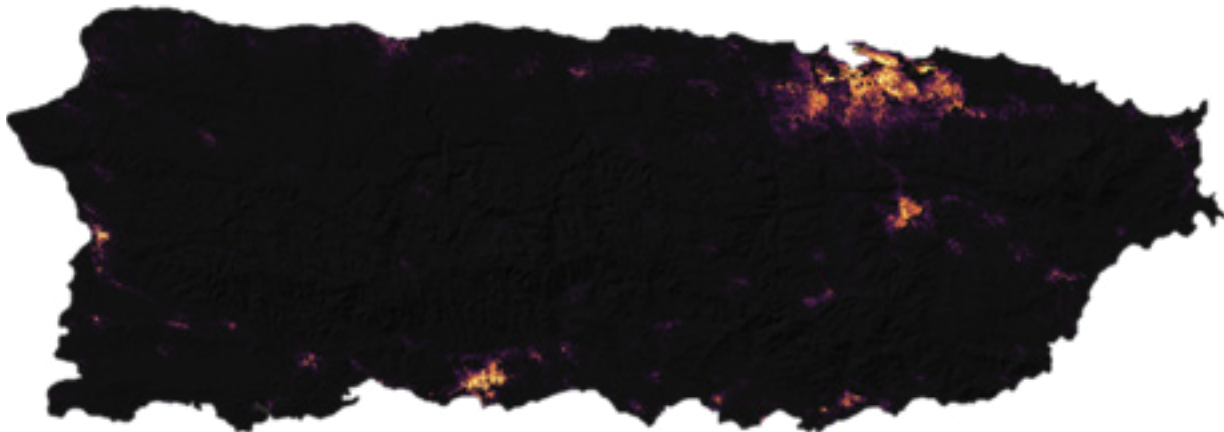
\*\* The reliability data is from the IEEE Power & Energy Society Large Utility Reliability Benchmark (2013-2018). The customer satisfaction data is from the National Call Center database. The safety data is from the Bureau of Labor Statistics for the Power, Transmission, Control and Distribution Industry Group for companies with 500-999 employees.



PREPA's challenges were both highlighted and significantly aggravated by hurricanes Irma and Maria, which struck Puerto Rico within two weeks of each other and resulted in one of the largest and most complex disaster response and recovery efforts in recent U.S. history. Irma skirted the Northern coast of Puerto Rico as a category five hurricane<sup>7</sup> on September 6 and 7, 2017, causing significant flooding, regional power and water outages, and other damage to Puerto Rico's infrastructure. On September 20, 2017, while Irma's response operations were still ongoing, Maria made a direct strike over Puerto Rico as a category four hurricane, causing widespread and unprecedented devastation and destruction. Maria resulted in loss of life and massive infrastructure and property damage that severely affected Puerto Rico's

population, economy, critical infrastructure, social service network, and healthcare system.

The combined impact of Irma and Maria led to a complete failure of the electrical grid, resulting in the longest power outage in U.S. history. Irma left approximately 70% of Puerto Rico without power and, shortly thereafter, Maria, the strongest hurricane to hit Puerto Rico in close to 100 years, made landfall and left 100% of Puerto Rico's residents without power for significant periods of time. On average, households went 84 days without power. Two months after Maria, the majority of people in Puerto Rico remained without power, and it was approximately 11 months before power was restored to 100% of Puerto Rico's residents.



*Impact of Maria to Puerto Rico.*

Maria essentially destroyed Puerto Rico's electric grid and severely disrupted cellular service, landlines, internet access, and other critical infrastructure. Consequently, water and sewer services shut down, first responders were unable to dispatch 911 calls, and transportation was brought to a halt. Schools and some healthcare facilities were forced to close, and hospitals had to rely on emergency generators. In addition to the massive power outage caused by Maria and the collateral damage to Puerto

Rico's infrastructure as a result of this power outage, Maria is one of the deadliest hurricanes in U.S. history, with approximately 3,000 deaths reported in the aftermath of the storm.

Irma and Maria struck Puerto Rico in the midst of an already dire financial situation for PREPA. Negative economic growth has been exacerbated by significant outmigration of the population, resulting in less demand. PREPA's balance sheet deterioration,

<sup>7</sup> The Federal Emergency Management Agency's ("FEMA's") definitions for hurricanes are based on the Saffir-Simpson scale which takes into account a storm's maximum sustained wind speed. A category four hurricane is defined as having sustained winds ranging from 130 to 165 miles per hour and that will result in significant infrastructure damage, power outages lasting for months, and loss of life. A category five hurricane is the highest category and is defined as sustained winds over 157 miles per hour where most power poles will be damaged resulting in widespread months-long outages.





*PREPA staff install Amber Smart LED "Turtle Friendly" light bulbs along coastal-areas of San Juan, San Juan, PR.*

together with continued budget imbalances between revenues and expenditures, and significant debt balance caused by deficit financing, led to the loss of capital markets access in 2014. This limited PREPA's ability to make necessary investments in Puerto Rico's power system, including investments to repair and modernize Puerto Rico's energy transmission infrastructure, which was vulnerable to outages even under normal conditions.

Today, almost three years later, power has been restored and access to clean water has greatly improved, but many temporary repairs remain in place, day-long power outages continue to occur from time to time, and collapsed utility poles, broken cross-arms, and uprooted trees are common on various parts of the island. The series of earthquakes that struck Puerto Rico in December 2019 and January 2020, and the ensuing damage particularly on the South of the island, further demonstrate the critical need for investment in infrastructure.

### 3.1.3 Government Response

Against the backdrop of these two devastating back-to-back hurricanes that intensified an economic and fiscal crisis, the Government sought to move forward in its economic and disaster recovery by investing in infrastructure, people, and the environment. In particular, Irma and Maria forced the Government to rethink how PREPA's power supply and delivery infrastructure should be managed and upgraded to ensure that it is better prepared for inevitable future weather events. A critical component of the transformation of the energy sector is the ability to bring to bear U.S. mainland and other international best industry practices to PREPA, as well as the expertise, experience, and know-how to design and execute on a transformation through managerial continuity and long-term planning.



Over the past decade, the Government has had success in bringing to bear such best industry practices, expertise, experience, and know-how to its infrastructure projects by entering into PPPs with private sector participants in other sectors pursuant to the framework set forth in Act 29. These include the long-term concession of toll roads PR-22 and PR-5 that was awarded in 2011 (the “**Toll Roads Project**”) and the long-term lease agreement for the Luis Muñoz Marín International Airport that was awarded in 2013 (the “**LMM Airport Project**”). In each of these cases, the Government sought to strike a balance between government and private sector participation through a mutually beneficial contractual relationship that results in the efficient, effective, and affordable delivery of public goods and services to all citizens of Puerto Rico.

### **Puerto Rico’s Existing PPP Program**

For several years, Puerto Rico has been one of the few U.S. jurisdictions with an organized PPP program. Even before the enactment of Act 120 and the Regulation, the Government enacted Act 29 and promulgated the Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Participatory Public-Private Partnerships Contracts under Act No. 29-2009, as amended (the “**Act 29 Regulation**”) in order to finance infrastructure projects and provide multiple public services.

By providing clarity, uniformity, and certainty with respect to PPP selection and contracting, Act 29 and the Act 29 Regulation comprise one of the most robust legal frameworks for PPPs in the Americas. In particular, Puerto Rico’s PPP program is guided by the following five key components of a successful PPP program identified by the World Bank Group: *clear public policy, strong legal framework, clear processes and institutional*

*responsibility, responsible financial management, and good governance arrangements*, each of which is described in more detail below.<sup>8</sup>

**Clear Public Policy** – Puerto Rico’s PPP program clearly articulates (i) the Government’s intent to use PPPs to deliver public services and (ii) the objectives, scope, and implementing principles of the PPP program.

**Strong Legal Framework** – Puerto Rico’s PPP program is grounded in a strong legal framework that sets the rules and boundaries for how PPPs are implemented.

**Clear Processes and Institutional Responsibility** – Puerto Rico’s PPP program provides a detailed, clear, and consistent process by which PPP projects are identified, developed, appraised, implemented, and managed, and sets forth the roles of different entities involved in that process.

**Responsible Financial Management** – Puerto Rico’s PPP program requires responsible public financial management that ensures PPPs provide value without placing undue burden on future generations.

**Good Governance Arrangements** – Puerto Rico’s PPP program provides for governance arrangements that allow other entities, such as auditing entities, the Legislature, and the public, to participate in PPP projects.

<sup>8</sup> See World Bank Group; Private Infrastructure Advisory Facility; Asian Development Bank; Inter-American Development Bank; Multilateral Investment Fund. Public-Private Partnerships Reference Guide, version 3, 2017.





PREPA employee replaces a light bulb, Caguas, PR.

Act 29 provides that the public policy with respect to PPPs must be to maintain such controls as are necessary to protect the public interest yet balance this need for controls with the profit-making purpose of any private operation. As described in Section 3.1.1 hereof (*PREPA and the T&D System*), the P3 Authority was created pursuant to Act 29 as a public corporation of the Government affiliated with AAFAF as part of the fiscal and economic component of the government of Puerto Rico. The P3 Authority is designated as the sole government entity authorized and responsible for implementing the Government's public policy on PPPs and for determining the functions, services, and facilities for which PPPs are to be established.<sup>9</sup>

Act 29 recognizes the need for PPPs to allow for the development of infrastructure and other projects by delegating the risks inherent to such development or service to the party that is best capable of assessing and managing such risks, improving services, creating new jobs,

and developing Puerto Rico's economy and competitiveness. Likewise, these partnerships enable the Government to make infrastructure projects feasible when the funds needed to complete a project are not available in the public treasury.

The robustness of the Act 29 framework is evidenced by the success of both the Toll Roads Project and the LMM Airport Project.

### ***The Toll Roads Project***

The Toll Roads Project was structured as a 40-year concession agreement (the "**Toll Roads Agreement**") between Autopistas Metropolitanas de Puerto Rico LLC ("**Metropistas**"), a consortium composed by Goldman Sachs Infrastructure Partners and Abertis Infraestructuras, and the Puerto Rico Highway and Transportation Authority ("**PRHTA**") for the maintenance and operation of two highways, PR-22 and PR-5. Pursuant to the Toll Roads Agreement, Metropistas made an up-front payment to PRHTA in the amount of \$1.08 billion and committed to make certain investments to upgrade toll roads PR-22 and PR-5 and bring them to world-class standards. The Toll Roads Agreement provides that revenues generated by the toll roads belong to Metropistas. The Toll Roads Project was the first concession of its type successfully achieved in Puerto Rico and was internationally recognized as a successful PPP project, winning both Project Finance International's ("**PFI's**") deal of the year in the Americas award and the American Road and Transportation Builders Association's project of the year award in 2011.

### ***The LMM Airport Project***

The LMM Airport Project was structured as a 40-year lease agreement (the "**LMM Airport Agreement**") between the Puerto Rico Ports

<sup>9</sup> In addition, Act 29 expressly states that it is the public policy of the Government to favor and promote the establishment of PPPs and further authorizes all departments, agencies, public corporations, and instrumentalities, as well as municipalities and the legislative and judicial branches of the Government, to use the establishment of PPPs in accordance with the process specified therein. Act 29 also prohibits the Government from legislating to limit the powers or rights granted to the P3 Authority and partnering government entities, like PREPA, under Act 29 until the obligations under an executed PPP contract are satisfied.



Authority ("PRPA") and Aerostar Airport Holdings LLC ("Aerostar"), a partnership between Grupo Aeroportuario de Sureste S.A.B. de C.V. and Highstar Capital IV, L.P., to operate the Luis Muñoz Marín International Airport, the busiest airport in the Caribbean with the largest air cargo operation in Puerto Rico. Pursuant to the LMM Airport Agreement, Aerostar made an up-front payment to PRPA in the amount of \$615 million, agreed to annual payments equal to a percentage of airport revenues, and committed to make certain investments to upgrade the airport facilities. Like in the Toll Roads Project, the LMM Airport Agreement provides that revenues belong to Aerostar. The LMM Airport Project was the first PPP completed for an international airport under the Federal Aviation Administration Pilot Program and was also internationally recognized as a successful PPP project, winning PFI's deal of the year award in 2013.

### ***Path Forward for the T&D System***

In light of this successful track-record and the existing legal framework for PPPs in Puerto Rico, the Government decided to undertake a more radical transformation of Puerto Rico's electric system involving private sector participation. In doing so, the Government is seeking solutions for the T&D System that:

- provide managerial continuity and long-term planning;
- are cost-effective and forward-looking;
- are resilient and built in accordance with codes, specifications, and standards consistent with mainland U.S. electric utilities;
- harness innovative thinking and best practices from around the world; and
- contribute to the greater economic development, revitalization, and growth of Puerto Rico (in alignment with broader Government efforts to achieve fiscal and economic stability).

### **3.1.4 Towards a Sustainable Transformation**

From the outset, there were a number of factors that challenged the viability of the Project and the ability to attract private sector participation, including, among others:

- the poor state of PREPA's energy infrastructure as a result of years of underinvestment;
- the complex financial restructuring process that PREPA is undertaking as a debtor under Title III;
- the fact that PREPA was in the process of developing and obtaining approval for a long term capital plan for both its generation and T&D business, which capital plan the private operator would have to factor into its proposal;
- the difficulty of knowing the quantum and timing of federal disaster recovery assistance that will be available; and
- the corporate reorganization that PREPA needs to undergo in order to separate responsibility for the generation and T&D assets with a view towards creating a more efficient electric system for Puerto Rico.

Given this unique set of challenges facing PREPA and the general economic and fiscal difficulties that Puerto Rico is experiencing, procuring private sector expertise to transform the electric system could not occur in a vacuum. Instead, the Government pursued a multi-pronged strategy – involving a new legal framework, plans to modernize the energy sector, federal disaster assistance funding, and relief for PREPA's financial challenges – in order to create the right environment for positive and long-lasting change of the energy sector.

### ***Bolstering the Legal Framework***

The first element of a more thorough energy transformation was the adoption of legislation that would provide, among other things, for private



sector participation in the transformation of the energy sector. The Government enacted Act 120 in June 2018 with the stated goal of transforming Puerto Rico's energy system into a modern, sustainable, reliable, efficient, cost effective, and resilient one pursuant to PPP or sale agreements with respect to the functions, services or facilities of PREPA (each such transaction, a "**PREPA Transaction**"). This new law, which provided the framework for the transformation of the energy sector, and the Regulation adopted thereunder, provide guidelines and procedures for, among other things:

- identifying the PREPA functions, services, or facilities for which PPPs will be established;
- identifying which PREPA assets related to energy generation will be sold or transferred through sale contracts or delegated to private operators through long-term operation and maintenance agreements;
- soliciting, obtaining, and evaluating proposals for PREPA Transactions;
- selecting the entities or individuals that will enter into transformation contracts with PREPA; and
- negotiating and awarding PPP contracts for PREPA Transactions.

Act 120 also set in motion the development of a new regulatory framework for the electric sector. A working group was created under Act 120 to develop a new energy public policy and regulatory framework, in consultation with the Southern States Energy Board and the U.S. Department of Energy, among others. Legislation to establish this new framework for Puerto Rico's energy sector, the Puerto Rico Energy Policy Act, Act No. 17-2019 (the "**Energy Policy Act**"), was signed into law on April 11, 2019. The Energy Policy Act formulates Puerto Rico's energy policy through 2050 and aims to set the parameters for a resilient, reliable, and robust energy system. In particular, the Energy Policy Act requires planning for greater



Generation Desk in the Monacillos System Control Center, San Juan, PR.

resilience through the establishment of micro-grids, distributed and renewable generation, and underground distribution lines.

In addition, as part of the Government's public policy to achieve diversification of electricity sources and energy technology infrastructure by reducing the dependence on fossil fuel-based energy sources, the Energy Policy Act (i) requires that at least 20% of PREPA's energy come from renewable sources by 2022, increasing to 40% by 2025 and 60% by 2040, and reaching 100% by 2050, and (ii) prohibits the production of energy through the combustion of coal and its derivatives as a source of generation beginning in 2028.

The Energy Policy Act also confirms the role of the PREB as the independent entity in charge of (A) regulating Puerto Rico's energy system with powers and duties to ensure fair, affordable, and reasonable costs through oversight and review of rates, and (B) supervising and enforcing Puerto Rico's energy policy.

Finally, the modernization of the regulatory framework has also taken a long-term view of the energy future of Puerto Rico. This is captured in the proposed Integrated Resource Plan (the "**IRP**") that will serve as the planning process and document for new generation investment by private



developers for a 20-year period. The IRP includes plans to transition to an increase of renewables in the generation mix, primarily in solar photovoltaics and battery storage.

### **Modernizing the Energy Sector**

Given Puerto Rico's geographic location and susceptibility to extreme weather events, there has been a progressive focus on transitioning Puerto Rico's electric system towards cleaner renewable energy sources that by their nature support resiliency and guard against the devastating effects of another hurricane. Consistent with the Energy Policy Act and other applicable law, the IRP and the Electric Grid Modernization Plan for Puerto Rico (the "GMP") contemplate transforming the energy system through the incorporation of more renewables, micro-grids, and distributed energy resources, which will ultimately drive economic opportunities and customer well-being.

The GMP was developed by the Central Office for Recovery and Reconstruction ("COR3") and the P3 Authority, in conjunction with PREPA, to provide a roadmap for the implementation of projects to transform the energy system through a detailed action plan tailored to Puerto Rico. The GMP adds granularity to the Government's vision to transform the electric system and sets the foundation for turning this vision into action with a view towards achieving a modernized, standardized, resilient, and distributed electric system in Puerto Rico, in accordance with the public policy set forth by Act 120 and the Energy Policy Act.

The programs and initiatives set forth in the GMP are guided by the following five core pillars for permanent reconstruction set forth in Act 120 and the Energy Policy Act: *customer-centricity*, *resiliency*, *reliability*, *affordability*, and *sustainability*, each of which is described in more detail below.

**Customer-Centricity** – The GMP seeks to transform the T&D System to provide customers with affordable and reliable power, as well as with transparent metrics for quality of service. Increasing customer engagement with the utility is an essential initiative to the transformation of PREPA's customer service system. By engaging customers with innovative products and value-added services that provide choice among rate plan and risk management options, customers are empowered to participate in and take ownership of their energy needs.

**Resiliency** – The GMP is centered on the concept of achieving an electric system that is able to adequately withstand future extreme weather and man-made events. As stated in the GMP, this requires continuous improvement of PREPA's emergency preparedness capabilities, including measures to support effective preparation for, management of, and timely recovery from major weather events.

**Reliability** – The GMP seeks to transform the electric system such that it provides best-in-class and reliable electric service, which is essential for all residents' well-being and economic development. Best-in-class power service requires meeting the growing demands of electricity users.

**Affordability** – The GMP seeks to (i) transform the electric system to provide electric service at a cost that is reasonable to all residents and businesses by maximizing operational efficiency and financial stability in running the utility and (ii) minimize the cost of supply, and reduce the dependence on imported fuels (and the associated volatility), in order to support affordable rates while remaining in line with the core pillars of resiliency and reliability.

**Sustainability** – The GMP is centered on the concept of achieving a safe electric system that is a leader in environmental stewardship. This requires not only a trained and engaged workforce, but also a transition from an electric system centered on fossil fuels to one in which renewable resources play a central role.





Personnel from Ingeniería Sur and PREPA's air division working to replace structures in order to improve electrical service, Villalba, PR.

### Securing Federal Funding

Another key component of the energy transformation involves the Government's efforts to secure federal disaster assistance funding to help rebuild Puerto Rico in the aftermath of Irma and Maria. These efforts have been essential not only to the recovery of Puerto Rico, but also to the ability to attract private sector investment. Market participants interested in contributing to PREPA's transformation have consistently stressed the importance of securing the federal government's support for the transformation efforts, particularly federal recovery funding.

In order to effectively procure and deploy Puerto Rico's federal funding needs, the Government has established a robust, centralized organizational framework that promotes transparency, governance, and accountability. The recently-formed COR3 serves as the nerve center of this effort. COR3 is based on similar agencies that have been successfully deployed in post-disaster

situations by other U.S. jurisdictions, including New York, New Jersey, and Louisiana. COR3 has been responsible for, among other things, (i) overseeing public and private sector efforts related to financial management of recovery funds, (ii) sub-recipient monitoring, (iii) providing training and technical assistance, (iv) performing internal auditing, and (v) conducting the reimbursement review process. Through these efforts, the Government was able to secure emergency supplemental appropriations of over \$36 billion for the recovery and reconstruction of Puerto Rico. Of this amount, it is estimated that a large portion will be appropriated for the energy system, based on eligible work.

In February 2020, FEMA published the Public Assistance Alternative Procedures (Section 428) Guide for Permanent Work (FEMA-4339-DR-PR) (February 2020) (the "**428 Guide**"). The 428 Guide is applicable to large permanent work projects in Puerto Rico for critical service facilities and provides that cost estimates for funding eligible projects will



be developed by FEMA. Certain cost estimates may be subject to validation by a third-party independent expert panel (the "**Expert Panel**"). The United States Army Corps of Engineers (USACE) Cost Engineering Center of Expertise acts as the Expert Panel under the 428 Guide. Expert Panel review is available under certain circumstances, including, among others, at an applicant's request for projects with a cost estimate greater than \$5 million. Allowable costs for estimates include architectural, engineering, environmental review and design fees, construction, other restoration and reconstruction costs, hazard mitigation, and direct administrative costs.

To support its work, COR3 hired various third-party experts with extensive global experience in disaster recovery and reconstruction efforts, including experts with experience in (i) project formulation and grant management, (ii) technology solutions, software development, and report and data management, (iii) strategy, compliance, and financial management, and (iv) energy-related matters.

### **Addressing Fiscal Challenges**

The final critical component of the energy transformation involves the Government's strategy for tackling the fiscal crisis that Puerto Rico and its public corporations have been facing. In 2016, recognizing the delicate fiscal condition of Puerto Rico, the U.S. Congress enacted PROMESA. PROMESA provides a series of mechanisms to achieve fiscal and budgetary balance and restore access to the capital markets to spur the revitalization of infrastructure in Puerto Rico. PROMESA also established the FOMB, which is tasked with working with the Government and the people of Puerto Rico to create the necessary foundation for economic growth. In July 2017, the FOMB filed a petition for relief under Title III on behalf of PREPA in order to begin the process of addressing PREPA's significant debt obligations and operational challenges.



Top: PREPA employee show off the new LED lights which will replace light bulbs currently used, San Juan, PR.

Bottom: Transformers stored in the Palo Seco warehouse, San Juan, PR.

Restructuring PREPA's legacy debt obligations is a key component of Puerto Rico's energy transformation and its successful conclusion will pave the way for a resilient, reliable, and affordable energy system. In addition, the Government has sought to rely on every tool available to it under Title III to provide private sector partners with the assurances they need to effectively contribute to the transformation. The Title III process has also allowed the Government, including the P3 Authority, to work closely with the FOMB and its Consultants to ensure that the transformation has the full support of all governmental stakeholders.



## 3.2 Project Objectives

The Government's overarching mission is to transform Puerto Rico's energy system into a modern, sustainable, reliable, efficient, cost-effective, and resilient one. Consistent with the foregoing, the Project is intended to achieve the following objectives for the T&D System:

- delivery of low-cost electricity to ratepayers of Puerto Rico;
- increase in T&D System resiliency, achieving performance in line with codes, specifications, and standards consistent with mainland U.S. electric utilities;
- increase in T&D System reliability;
- deployment of new technologies; and
- implementation of industry best practices and operational excellence through managerial continuity and long-term planning.

The Government determined that these objectives would be best achieved through a PPP with a world class private operator that would be able to bring to bear its experience and expertise and best practices from the U.S. mainland and other jurisdictions. The private operator would need to have the appropriate experience managing large-scale electric utilities, as well the technical, operational, and financial wherewithal to successfully operate the T&D System. More specifically, potential private partners would have to demonstrate: (i) experience operating a large electric utility and administering federal disaster recovery funding, (ii) financial strength and capital resources, with significant access to the capital markets, and (iii) strong technical expertise, with a track record of high-quality operations.

Consistent with the principles set forth in Section 204(b)(2) of PROMESA, the Project is intended to "promote market competition" by harnessing



*PREPA employee installs a light pole, Bayamón, PR.*

private sector creativity and resources to help fully deliver on the economic, infrastructure, and societal goals identified by the Government. Furthermore, the Project is consistent and compliant with the PREPA Fiscal Plan, as certified on June 27, 2019 by the FOMB (the "**Certified Fiscal Plan**"). The Certified Fiscal Plan describes the Project as one of the major transformation initiatives to be implemented in order for PREPA to become a customer-centric and financially sustainable utility. As stated therein, the Certified Fiscal Plan "is predicated on the implementation of an Energy Sector Transformation, leveraging private sector capital and operational expertise."

As further described in this Report, the procurement process was undertaken with various goals in mind. First, the Government was keenly focused on implementing a robust, competitive, and transparent procurement process to identify the



private partner best positioned to accomplish the Project's objectives. Second, from its inception, the procurement process was carried out in coordination with the FOMB and its Consultants given the importance of aligning the process with the efforts to address PREPA's financial challenges and aligning the Project with the Certified Fiscal Plan. Third, throughout the procurement process, the P3 Authority was in communication with the PREB to keep it abreast of developments and

facilitate its review of the O&M Agreement to determine its compliance with the energy public policy and the regulatory framework. Finally, given the importance of federal funding support to the transformation, the procurement process was designed to provide potential private partners with various opportunities to better understand the current state of the recovery effort and the status of the various applications for federal funding.<sup>10</sup>



ATCO owns and operates more than 54,000 miles of T&D lines, delivering electricity in a sprawling service territory covering 165,000 square miles.

<sup>10</sup> For more information on the rationale for transforming Puerto Rico's energy system through a PPP with a world class private operator, please see the report titled "Advantages of a Third-Party T&D Operator of the Puerto Rico T&D System" attached as Exhibit B hereto (*Advantages of a Third-Party T&D Operator of the Puerto Rico T&D System*).



## 4. Procurement Process







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## 4.1 Partnership Committee

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Act 29 and the Regulation require that the P3 Authority establish a Partnership Committee for each PPP project. Accordingly, the P3 Authority established the Partnership Committee for the Project on August 1, 2018. Pursuant to Section 5(c) of Act 120, the P3 Authority must designate a Partnership Committee (as required by Act 29) to evaluate and select qualified Proponents and to establish and negotiate the terms of the O&M Agreement. Section 8 of Act 29 requires that the Partnership Committee be composed of:

- the executive director of the AAFAF or his/her delegate;
- a PREPA officer or his/her delegate;
- one member of the board of directors of PREPA, his/her delegate, or an official thereof selected by the P3 Authority Board based on him/her having specialized knowledge pertinent to the project under consideration by the relevant partnership committee; and
- two officials from any government entity chosen by the P3 Authority Board for their knowledge and experience in the type of project under consideration by the relevant partnership committee.

As of the date of the Recommended Award, and pursuant to the requirements summarized in the paragraph above, the Partnership Committee was comprised of the following individuals:

- **Omar Marrero, Esq., Executive Director & Chairman of AAFAF; CFO of the Government of Puerto Rico** – Omar Marrero previously served as Executive Director of the P3 Authority and as Secretary of the Department of Consumer Affairs of Puerto Rico. Omar Marrero formerly served as Executive Director of the Puerto Rico Ports Authority, as Executive Director of

the Puerto Rico Conventions District Authority, as Vice President of the Board of Directors of PREPA, as the Governor's Authorized Representative ("GAR") before FEMA, and as Executive Director of COR3;

- **Jose Ortiz, PE, Executive Director of PREPA** – Jose Ortiz previously served as Chairman of the Board of PREPA and as Executive President of the Puerto Rico Aqueduct and Sewer Authority;
- **Ralph Kreil, PE, President of the Board of Directors of PREPA** – Ralph Kreil previously served as President of the Engineers and Land Surveyors Association of Puerto Rico;
- **Edison Avilés, PE, Esq., Chairman of the PREB** – Edison Avilés previously served as President of the Electrical Engineers Institute of the Professional College of Engineers and Land Surveyors of Puerto Rico; and
- **Ottmar Chavez, Executive Director of COR3** – Ottmar Chavez currently serves as the GAR before FEMA. Ottmar Chavez also serves as the Administrator of the General Service Administration of Puerto Rico.

Edison Avilés, Jose Ortiz, and Ralph Kreil have been members of the Partnership Committee since it was first established by the P3 Authority.

As a result of his appointment as executive director of AAFAF, Omar Marrero became a member of the Partnership Committee on July 30, 2019.

Ottmar Chavez became a member of the Partnership Committee on September 9, 2019, replacing Jorge Morales, a government official appointed to the Partnership Committee for his knowledge and experience in the energy sector who subsequently elected to leave public office.



Efran Paredes, Director of PREPA's Planning and Environmental Protection Directorate and PREPA liaison to the Partnership Committee, participated in various meetings of the Partnership Committee. Efran Paredes also serves as a representative of PREPA and PREPA's Executive Director. Efran Paredes did not vote on any of the Partnership Committee's decisions with respect to the Project, including the Partnership Committee's determination of the Recommended Award.

Pursuant to Section 8 of Act 29, the Partnership Committee is responsible for the overall management of the process for the award of the Project and determining the Recommended Award, including:

- engaging, or requesting that AAFAF engage, advisors, experts, or consultants on behalf of PREPA;
- approving documents prepared and distributed in connection with the RFQ Process and the RFP Process;
- evaluating and qualifying the SOQs submitted in response to the RFQ by the five Respondents that participated in the RFQ Process;
- inviting the qualified Respondents to participate in the RFP Process;
- engaging in, or supervising, the negotiation of the terms and conditions of the O&M Agreement with the Proponents;
- evaluating the Definitive Proposals submitted by the two Proponents and selecting the one that meets the requirements of the RFP and better serves the goals of the Project;
- preparing this Report and submitting the O&M Agreement for the Required Approvals; and
- overseeing proper compliance with the procedures established for the negotiation of the O&M Agreement, the determination of the Recommended Award, and the execution of the final O&M Agreement, including those requirements set forth in Act 29, Act 120, and the Regulation.



*Quanta line workers repairing an electricity delivery system.*



## 4.2 Market Sounding

In the summer of 2018, the Government began a deliberate effort to transform and revitalize Puerto Rico's energy system by conducting a market sounding process. The Government, including the P3 Authority, AAFAF and PREPA, together with the FOMB, issued a letter soliciting private sector feedback on the energy transformation generally and the Project specifically, with the stated goal of creating a modern, sustainable, reliable, efficient, cost effective, and resilient energy system. The market sounding also requested feedback on (i) the regulatory structure of the electric sector in Puerto Rico and (ii) potential transaction structures for the participation of the private sector in both the T&D System and PREPA's generation assets.

The market sounding indicated substantial interest in the Project, and the Government received approximately 20 responses. Respondents included (i) strategic companies spanning the regulated utilities, power generation, oil and gas, and general industrials sectors, and (ii) financial sponsors with experience in power-related infrastructure. Respondents provided generally consistent feedback on a number of key items. All of the respondents:

- stressed the importance of having a strong and fully independent regulator, consistent with mainland U.S. standards;
- indicated that, for a PPP contract to be feasible, it would need to be a long-term agreement with a creditworthy Government counterparty; and
- cited a willingness to make ongoing investments in the T&D infrastructure and new generation on the island.

In addition, many of the respondents indicated a familiarity with concession structures and cited past instances of successful PPPs, and some of the respondents indicated a need for federal funding in order to fulfill the goal to “build back better” the energy sector.



*Quanta lineworker repairing a distribution line.*



## 4.3 Qualification Process

On October 31, 2018, the P3 Authority issued the RFQ pursuant to Section 5 of Act 120 and Section 3 of Act 29. Pursuant to Section 1.4 of the RFQ, the objective of the RFQ was to enable the Partnership Committee to identify the Respondents qualified to participate in the RFP Process based on their SOQs, which were due on December 5, 2018.

Section 3 of the RFQ provided that the RFQ Process sought SOQs from companies or consortia that demonstrated, among other things:

- experience operating large-scale electric that on a sustained basis involved at least 250,000 customers, a rate base of at least \$2 billion, and at least 1,000 employees;
- the ability to operate electric utility T&D infrastructure on an island or other stranded location, in both urban and rural settings, and under challenging natural circumstances, including natural-disaster prone regions;
- experience with formal regulatory proceedings or similar rate justification proceedings in a U.S. or similar regulatory jurisdiction, and a sustained history of reasonable customer rates;
- a track record of achieving key operational metrics (including customer interruptions, safety, and customer satisfaction) within industry standards for U.S. mainland utilities;
- experience managing disaster recovery operations, federal disaster relief funding, and relationships with the relevant government entities; and
- a track record of earned return on equity approximating regulatory authorized returns on equity, and an ability to raise significant quantities of debt and equity through financings.

As set forth in Section 2.3 of the RFQ, the RFQ contemplated PREPA entering into a long-term public-private partnership contract with a private partner, the precise structure of which was still to be determined but pursuant to which PREPA would retain ownership of and title to all assets of the T&D System and the private partner would assume all rights and responsibilities related to the operation, maintenance, and management of the T&D System, including:

operation and maintenance of the T&D assets and system, including streetlights and meters;

control center operations, including generation scheduling and economic system dispatch;

integration of renewable generation and distributed energy resources;

energy procurement;

end customer metering, service, and support (including billing and collections);

new service requests for secondary and primary connected customers;

outage management and restoration;

coordination of emergency planning and storm restoration and recovery;

interface with regulators, including with respect to environmental compliance;

general system planning, including sourcing, designing, and implementing system growth and improvement;

acting as a servicer in connection with any charges imposed in respect of legacy obligations; and

ongoing public reporting.



In addition to performing the services typically performed by the operator of a T&D system, the RFQ contemplated the private partner assisting with the procurement and administration of federal funds received for the restoration of the T&D System. In certain circumstances, the private partner would have the opportunity to make capital investments in the T&D System not otherwise paid for by federal disaster recovery funding. Under the contemplated structure for the Project, the private partner's compensation would consist of a regulated base management fee supplemented by performance payments linked to established performance standards aimed at improving performance of the T&D System and customer experience.<sup>11</sup>

Pursuant to Section 1.9 of the RFQ, Respondents were able to submit any requests for clarifications ("**RFCs**") they had with respect to the contents of the RFQ (each such RFC, an "**RFQ-RFC**") to the P3 Authority prior to November 14, 2018. On November 20, 2018, the P3 Authority issued responses to the RFQ-RFCs submitted by Respondents pursuant to the process established in Section 5.4 of the Regulation. The RFQ and the P3 Authority's responses to such RFQ-RFCs are available on the P3 Authority's website ([www.p3.pr.gov](http://www.p3.pr.gov)).

The P3 Authority received five SOQs from the following Respondents:

- Duke;
- Exelon;
- ITC Holdings, Corp;
- LUMA; and
- PSEG.

Pursuant to Section 8(b) of Act 29 and Section 3.4 of the Regulation, the Partnership Committee evaluated each SOQ based on the requirements set forth in the RFQ. Specifically, the Partnership Committee evaluated each SOQ by considering the extent to which Respondents satisfied the evaluation criteria established in Section 3 of the RFQ based on scorecards established by the Consultants.

On January 10, 2019, Partnership Committee met to analyze the information contained in the SOQs and score the SOQs. On January 17, 2019, and based on the information included in the SOQs, the following entities (including one consortium) were selected to participate in the RFP Process:<sup>12</sup>

<sup>11</sup> For more information on the RFQ Process please see the RFQ attached as Exhibit C hereto (*Request for Qualifications*).

<sup>12</sup> For more information on the Respondents and the RFQ Process please see the report titled "Qualifications Analysis and Shortlist Report" attached as Exhibit D hereto (*Qualification Analysis and Shortlist Report*).





**Duke** (NYSE:DUK) – Duke is a company that, through a number of electric and gas utility affiliates, serves approximately 7.6 million customers. Duke is based in North Carolina and serves electric and gas utility customers in service territories covering 95,000 square miles across Florida, Indiana, Kentucky, North Carolina, Ohio, and South Carolina. Duke affiliates operate transmission and distribution systems that extend more than 295,000 miles.



**Exelon** (NYSE:EXC) – Exelon is an Illinois-based Fortune 100-listed company that owns a number of gas and electric utility companies. Specifically, Exelon owns 16,966 miles of transmission lines and 171,605 miles of distribution lines. In 2017, Exelon utility affiliates served more than 10 million customers in Delaware, Illinois, Maryland, New Jersey, Pennsylvania, Virginia, and Washington, D.C.



**LUMA** – LUMA is a consortium composed of two companies, ATCO and Quanta, with broad and diverse experience in the field of electric power, and IEM. ATCO offers innovative business solutions and services on various platforms, including electricity, structures and logistics, pipelines and liquids, and retail energy. Although it has operations in various countries around the world, ATCO is based in Edmonton, Canada, and delivers electricity in a sprawling service territory covering 1,650,000 square miles. Quanta is based in Texas and provides infrastructure solutions for the electric power, oil and gas, and telecommunications industries across North America, with projects in various U.S. states, including California, Georgia, Maine, Texas, and Canada. The LUMA consortium also includes IEM as a prime subcontractor. IEM offers comprehensive emergency management and disaster recovery services, including obtaining, managing, and retaining federal funds, and implementing disaster recovery programs funded through government sources.



**PSEG** (NYSE:PEG) – PSEG is a New Jersey-based company that, through its utility affiliate, provides natural gas and electric utility services to around 3.8 million customers in Connecticut, Hawaii, Maryland, New Jersey, New York, and Pennsylvania, and operates a combined 2,100 miles of transmission lines and 20,000 miles of distribution lines.



## 4.4 Request for Proposals

### 4.4.1 RFP and RFP Addenda

On February 1, 2019, the P3 Authority issued the RFP to Proponents pursuant to Section 5 of Act 120 and Section 3 of Act 29. The RFP Process sought Definitive Proposals from companies and consortia that had been pre-qualified in the RFQ Process. The objective of the RFP Process was to enable the Partnership Committee to determine the Proponent best qualified to enter into the O&M Agreement, based on the Definitive Proposals.

The P3 Authority issued seven addenda to the RFP to (i) update the timeline of the RFP Process, (ii) update the processes and procedures to be used to implement the RFP Process, including the evaluation criteria and weighting to be applied to the Definitive Proposals and the Definitive Proposal submission instructions, and (iii) distribute certain transaction documents provided to the Proponents prior to November 25, 2019, the date on which Definitive Proposals were due (the “**Proposal Submission Deadline**”), including the

term sheets summarizing the two contemplated transaction structures and various drafts of the O&M Agreement. The addenda were issued on April 17, May 24, June 14, August 19, September 4, November 1, and November 17, 2019.

As indicated below, certain transaction documents were distributed by addenda to the RFP, and the P3 Authority also distributed documents to the Proponents using the Messaging Tab in PowerAdvocate®<sup>13</sup> (each such communication, a “**PowerAdvocate® Message**”).

During the period from February 2019 through November 2019, the Proponents received the following three draft term sheets and four drafts of the O&M Agreement:

- an indicative draft term sheet summarizing the initial terms of a contemplated concession structure (the “**Indicative Concession Term Sheet**”), distributed on February 1, 2019, as part of the RFP;



*Substation, Mayagüez, PR.*

<sup>13</sup> PowerAdvocate® is a digital platform specifically designed for the energy industry to make competitive procurement easy and efficient. With standardized data collection and reporting, go-to-market templates, customizable datasheets and access to a database of suppliers, PowerAdvocate® enabled the P3 Authority to (i) accelerate strategic sourcing activity through reduced cycle time, (ii) unearth hidden margin and gain negotiation leverage through granular bid data analysis, (iii) easily collaborate with business stakeholders across engineering, finance, operations, leadership, and procurement, and (iv) centrally track, measure, and report on savings over time.



- an indicative draft term sheet summarizing the initial terms of an operation and maintenance structure (the "**Indicative O&M Term Sheet**"), distributed on March 13, 2019, as part of a PowerAdvocate@ Message;
- a second draft of the O&M Term Sheet, incorporating comments received from Proponents to the Indicative O&M Term Sheet (the "**Revised O&M Term Sheet**"), distributed April 17, 2019, as part of the first addendum to the RFP;
- an initial draft of the O&M Agreement (the "**First Draft O&M Agreement**"), distributed on May 24, 2019, as part the second addendum to the RFP;
- a second draft of the O&M Agreement (the "**Second Draft O&M Agreement**"), distributed on September 4, 2019, as part of the fifth addendum to the RFP;
- a revised third draft of the O&M Agreement (the "**Third Draft O&M Agreement**"), distributed first on October 28, 2019, as part of a PowerAdvocate@ Message, and then subsequently published on November 1, 2019, as part of the sixth addendum to the RFP; and
- a final revised draft of the O&M Agreement (the "**Final Form of O&M Agreement**"), distributed on November 17, 2019, as part of the final addendum to the RFP.

Pursuant to the process set forth in the RFP, the Proponents (i) provided written comments to and markups of the two term sheets and the three drafts of the O&M Agreement, and (ii) met with the P3 Authority, the P3 Consultants, and the FOMB Representatives on four occasions to walk through and discuss their comments to the Indicative Concession Term Sheet, the Indicative O&M

Term Sheet, and the first two drafts of the O&M Agreement. Proponents discussed their comments to the third draft of the O&M Agreement via teleconference.

Exelon elected not to proceed in the RFP Process in February 2019.<sup>14</sup> Duke elected not to proceed in the RFP Process in May 2019.<sup>15</sup>

#### 4.4.2 Due Diligence

Throughout the RFP Process, the Proponents were provided the opportunity to conduct extensive due diligence on the T&D System.

##### Data Room

Subject to having signed confidentiality agreements, on February 1, 2019, the Proponents were given access to a digital data room with information and key documents related to the Project (the "**Data Room**"). Specifically, 17,988 documents related to PREPA totaling 149,181 megabytes ("**MBs**") of data were uploaded to the Data Room, including the following, among others:

- real property documents, including documents related to PREPA's commercial, T&D, hydro, irrigation, substation, and supply real estate (4,513 documents totaling 108,672 MBs of data);
- rate and regulatory documents and records (4,180 documents totaling 5,474 MBs of data);
- federal funding-related documents and records (3,733 documents totaling 7,060 MBs of data);
- environmental permits, approvals, and statements, including PREPA's emissions data and fuel quality and recycling reports (1,734 documents totaling 10,062 MBs of data);

<sup>14</sup> Of the transaction documents distributed to Proponents, Exelon only received the Indicative Concession Term Sheet issued as part of the RFP. Because Exelon elected not to participate in the RFP Process shortly after the RFP was issued, Exelon did not provide comments to any of the transaction documents or participate in any meetings to discuss the transaction documents.

<sup>15</sup> Of the transaction documents distributed to Proponents, Duke received the Indicative Concession Term Sheet, the Indicative O&M Term Sheet, and the Revised O&M Term Sheet. Duke elected not to proceed in the RFP Process shortly before the First Draft O&M Agreement was issued as part of the second addendum to the RFP. Accordingly, Duke did not participate in the process for providing comments to the drafts of the O&M Agreement, including the meetings held with Proponents to discuss such comments.



- commercial contracts and other agreements, including PREPA's purchase power, long term service, operating, and restructuring support agreements (1,184 documents totaling 7,952 MBs of data);
- human resources documents and records, including documents with PREPA's staffing, benefits, worker health and safety, and employee training information (1,000 documents totaling 936 MBs of data);
- facility data and operations records, including descriptions of PREPA's assets, maps of the T&D System, and fuel and gas pipeline inspection records (708 documents totaling 1,905 MBs of data);
- independent engineer and technical reports, including PREPA's historical IRPs (484 documents totaling 6,192 MBs of data);
- finance and accounting records, including PREPA's audited financial statements, monthly operating reports, depreciation studies, and fiscal plans (208 documents totaling 335 MBs of data);
- insurance documents and records (70 documents totaling 272 MBs of data);
- information technology documents and records (50 documents totaling 87 MBs of data); and
- litigation documents and records (22 documents totaling 15 MBs of data).

In addition, certain memoranda prepared by the Consultants summarizing key elements of the Project were uploaded to the Data Room, including:

- a confidential information memorandum;
- a financial model for the Project;
- a white paper on the electric sector regulatory framework;
- a white paper on environmental considerations;
- a white paper on federal funding;
- a white paper on labor considerations; and
- a white paper on the Title III process.

### **Management Presentations and Site Visits**

Key officers, directors, and managers of PREPA, together with certain of their advisors and representatives of the P3 Authority, and AAFAF, made presentations regarding the Project (the "**Management Presentation**") to each Proponent. Various Consultants and the FOMB Representatives attended the Management Presentations.

The Management Presentations and site visits to various PREPA facilities (the "**Site Visits**") were held with the Proponents in Puerto Rico on the following dates:

PSEG – April 3 and April 4, 2019;

Duke – April 8 and April 9, 2019; and

LUMA – April 9 and April 10, 2019.

Table 2 includes the agenda for each of the Management Presentations, including the topics covered and the key officers, directors, and managers of PREPA who presented.<sup>16</sup>

<sup>16</sup> For more information on the Management Presentations please see PREPA's Management Presentation attached as Exhibit E hereto (*PREPA Management Presentation*).



**TABLE 2: AGENDA FOR MANAGEMENT PRESENTATIONS**

<b>Topic</b>	<b>Presenters</b>
<b>Introduction to PREPA and the Transformation</b>	José Ortíz, PE Chief Executive Officer  Elí Díaz, PE Chairman of the Governing Board
<b>Project Management Office / Transformation Execution Support</b>	Fernando Padilla Project Management Office Administrator
<b>Future State of the T&amp;D System</b>	Efran Paredes, PE Director of Planning and Environmental Protection
<b>Overview of the Current T&amp;D System</b>	Jose Sepulveda, PE Director of Transmission and Distribution  Humberto Campán, PE Administrator, Transmission and Distribution
<b>System Operations</b>	Gary Soto, PE System Operations Manager
<b>Customer Service and Billing</b>	Noriette Figueroa-Meléndez Director of Customer Service
<b>Environmental Overview</b>	Efran Paredes, PE Director of Planning and Environmental Protection  Luisette X. Ríos Head of Environmental Compliance Division
<b>Human Resources and Safety</b>	Marc Thys, Esq. Director of Human Resources and Labor Affairs  Shehaly Rosado-Flores Chief of Occupational Safety Division
<b>Information Technology</b>	Hiram Medero-Fernández Chief Strategy and Innovation Officer
<b>Financial Overview</b>	Nelson Morales Director of Finance

On the Site Visits, the Proponents were given the opportunity to visit the following PREPA facilities, among others:

Aguas Buenas G.I.S.	Cayey T.C.	Monacillos Control Center	Cambalache Generation Facilities
Aguas Buenas Substation	Jácome Substation	San Juan Generation Facilities	Santurce PREPA Headquarters
Caguas T.C.	L51000	Manati T.C.	PREPA Call Center
Caguas 13.2 Substation	L50900	Feeder 8404-03	Monacillos Control Center



### RFP Requests for Clarification

Proponents were able to submit any RFCs they had with respect to the contents of the RFP, the information available in the Data Room, the T&D System, and other matters related to the Project (each such RFC, an "**RFP-RFC**") to the P3 Authority prior to the Proposal Submission Deadline. The RFP required that all RFP-RFCs be submitted in writing through a PowerAdvocate® Message. Verbal RFP-RFCs were not accepted.

The P3 Authority generally answered RFP-RFCs in writing through a PowerAdvocate® Message. RFP-RFCs were made available to all Proponents together with the answers thereto, unless the Proponent requested that an RFP-RFC be given confidential treatment and the P3 Authority agreed that such confidential treatment of the RFP-RFC was appropriate.

Table 3 includes a summary of all of the RFP-RFCs by topic submitted by each of LUMA and PSEG prior to the Proposal Submission Deadline. Duke also submitted various RFP-RFCs before it elected to withdraw from the RFP Process.

**TABLE 3: SUMMARY OF RFP-RFCs SUBMITTED BY PROPONENTS**

	LUMA		PSEG		Total	
Question Topic	Received & Closed	% of LUMA Questions	Received & Closed	% of PSEG Questions	Received & Closed	% of Total Questions
Information Technology	78	18.01%	34	11.15%	112	15.18%
Finance	82	18.94%	10	3.28%	92	12.47%
Human Resources & Labor	19	4.39%	85	27.87%	104	14.09%
Customer Service	54	12.47%	10	3.28%	64	8.67%
Planning / Contracts	21	4.85%	29	9.51%	50	6.78%
Environmental	26	6.00%	17	5.57%	43	5.83%
Legal	36	8.31%	19	6.23%	55	7.45%
Other	20	4.62%	25	8.20%	45	6.10%
Transmission	10	2.31%	24	7.87%	34	4.61%
Regulatory	12	2.77%	10	3.28%	22	2.98%
Federal Funding	5	1.15%	19	6.23%	24	3.25%
Generation	4	0.92%	8	2.62%	12	1.63%
Safety	2	0.46%	8	2.62%	10	1.36%
Internal Audit	8	1.85%	N/A	N/A	8	1.08%
Miscellaneous	56	12.93%	7	2.30%	63	8.54%
<b>Total</b>	<b>433</b>	<b>100%</b>	<b>305</b>	<b>100%</b>	<b>738</b>	<b>100%</b>



### ***Due Diligence Meetings and Calls***

Each of LUMA and PSEG participated in various diligence calls and in-person diligence sessions with the P3 Authority, the P3 Consultants, and the FOMB Representatives between March and October 2019.

LUMA participated in diligence calls and in-person meetings regarding the following topics on the following dates:

- diligence calls regarding the financial model on March 4 and June 12, 2019;
- diligence call regarding tax matters on August 1, 2019;
- diligence calls to discuss generation and the demarcation of PREPA's assets on September 5 and October 10, 2019;
- diligence call regarding Title-III related labor matters on October 10, 2019;
- diligence session in Puerto Rico with respect to PREPA's budget, the IRP, and PREPA's capital program on June 10 and June 12, 2019;
- in-person meetings to discuss federal funding with Baker Donelson on September 12, 2019; and
- in-person meetings to discuss federal funding with representative of FEMA and COR3 on October 16, 2019.

PSEG participated in diligence calls and in-person meetings regarding the following topics on the following dates:

- diligence call regarding the financial model on June 13, 2019;
- diligence call regarding information technology and employment matters on June 20, 2019;

- diligence calls regarding generation and the demarcation of PREPA's assets on September 5 and October 10, 2019;
- diligence calls regarding Title III-related labor matters on October 14, 2019;
- diligence sessions in Puerto Rico with respect to PREPA's budget, the IRP, and PREPA's capital program on June 12 and June 13, 2019;
- in-person meetings to discuss federal funding with Baker Donelson on September 12, 2019; and
- in-person meetings to discuss federal funding with representative of FEMA and COR3 on October 16, 2019.

### **4.4.3 Transaction Structure**

In furtherance of its responsibilities under Act 29 and Act 120, the Partnership Committee evaluated various potential transaction structures for the Project, which impacted the key terms and conditions of the PPP contract to be entered into, the varying degrees and types of risk assumed by each party, and the compensation of the party awarded the O&M Agreement.

Transactions for similar projects have traditionally been structured as either:

- concession arrangements, pursuant to which (i) the government retains legal title to the assets and (ii) the private partner owns the revenues and is compensated based on return on capital invested into the relevant assets; or
- operation and maintenance arrangements, pursuant to which (i) the government retains legal title to the assets and the revenues and (ii) the private partner's compensation consists of a fixed fee for providing certain operation and maintenance services and a variable incentive fee based on the private partner exceeding certain performance metrics.





*ATCO employee attending to a distribution line.*

The Partnership Committee considered both such structures for the transaction and a hybrid approach that incorporated elements of both the concession and the operation and maintenance structures.

In addition to the stated goals of delivering affordable electricity to ratepayers of Puerto Rico, modernizing the T&D System, and increasing its reliability, the key considerations in selecting the transaction structure for the Project were:

- the Government's intent that PREPA retain title to the T&D System;
- the Government's stated preference for private sector control of the T&D System;
- preservation of the tax-exempt status of PREPA's legacy and restructured debt; and
- preservation of PREPA's eligibility for current and future federal disaster recovery funding.

As a threshold matter, it is worth noting that, consistent with Act 120, the Government always intended to structure the Project as a long-term concession, lease, or operation and maintenance arrangement pursuant to which a private party operates the T&D System and exercises control over the T&D assets, but ownership remains with the Government and possession of the assets reverts to the Government at the end of the terms of the arrangement. In other words, the Government never intended to pursue a transaction structure that involved the outright sale of the T&D assets or the transfer of ownership rights to such assets. By the same token, under the structure of the Project, the Government never intended to cede, and is in fact not ceding, its control over rates or performance standards.

PPPs in Puerto Rico are typically structured in this manner, given that retaining ownership of the public assets allows the Government to maintain a supervisory role and ensures that the private partner in a given PPP project is providing the relevant public services in a manner that advances



the Government's public policy goals and the objectives of the particular project. More specifically, a transaction structure in which the Government retains title to the assets (subject to the PPP) allows the Government to develop key performance indicators ("KPIs") for a particular project and apply such KPIs to the private partner's performance.

In the context of the Project, because possession of the T&D System reverts to the Government at the end of the O&M Agreement, the O&M Agreement includes various safeguards that function as KPIs and can be used to measure the performance of the Operator, these include, among others, PREB's right to review and approve the Performance Metrics and the requirement that the Operator and the P3 Authority collaborate to develop various plans during the Front-End Transition Period.

### ***Concession Term Sheet Discussions***

The RFP included a summary of the initial terms of a concession structure in the Indicative Concession Term Sheet included in an annex thereto. Pursuant to the process set forth in the RFP, the Proponents provided comments to the Indicative Concession Term Sheet in mid-February 2019. Upon receipt of the comments to the Indicative Concession Term Sheet, the P3 Authority, the P3 Consultants, and the FOMB Representatives met with each Proponent to walk through and discuss its comments to the Indicative Concession Term Sheet.

The meetings to discuss the Indicative Concession Term Sheet with the Proponents were held on the following dates:

- PSEG – February 26, 2019;
- LUMA – February 27, 2019; and
- Duke – March 4, 2019.

Proponents provided initial feedback on the Indicative Concession Term Sheet and each engaged in meaningful discussions with respect to the Title III process, the regulatory framework, federal funding, and other relevant topics.

However, the P3 Authority received advice from the Consultants with respect to potential drawbacks of a concession structure. Tax counsel advised that a concession structure might not comply with the IRS rules and guidelines related to qualified management agreements ("QMAs") and thus could jeopardize the tax-exempt status of PREPA's legacy and restructured debt. To avoid this risk, tax counsel recommended that the Partnership Committee and the P3 Authority consider a QMA-compliant operation and maintenance structure for the transaction. Similarly, federal procurement counsel advised that, of the potential transaction structures, a concession posed the greater risk to PREPA's current and future eligibility for federal disaster relief funding. This is because eligibility for federal funding requires PREPA, as applicant, to not only own the damaged property, but also be responsible for disaster-related restoration of the property at the time of the damage-causing incident, which would not be the case under a traditional concession. Finally, the Government was also cognizant of the fact that a concession structure, which would likely preclude federal disaster relief funding based on federal procurement counsel's advice, would lead to increased rates. This is because a key feature of the concession structure is capital investment by the private sector participant and, absent federal funding, the private investor would need to raise consumer rates in order to recoup its investment in the T&D System.

In light of (i) successful negotiations with PREPA's creditors being dependent on the tax-exempt status of PREPA's legacy and restructured debt, (ii) the Government's desire to preserve the availability of federal funds for future disaster recovery, and (iii) the Government's focus on maintaining the lowest possible rates for the people of Puerto Rico, on March 11, 2019, the Partnership Committee agreed to present Proponents the option to consider an alternative operation and maintenance structure.

In addition, in discussions with the Proponents about the transaction structure, two Proponents indicated significant discomfort with the concession structure



given (i) the large capital investment in the T&D System that a concession would require of a private operator and (ii) the significant risk and uncertainty relating to the electric sector and economy more generally. Therefore, based on the recommendation of the Consultants, feedback from Proponents, and the Government's own reservations about a concession structure, the Partnership Committee elected to proceed with a QMA-compliant operation and maintenance structure.<sup>17</sup>

### **O&M Term Sheet Discussions**

On March 13, 2019, the Proponents received the Indicative O&M Term Sheet. The P3 Authority provided Proponents the opportunity to review and provide comments on the term sheets by no later than March 27, 2019. On April 17, 2019, the Revised O&M Term Sheet was distributed to the Proponents as part of the first addendum to the RFP. This revised draft reflected (i) the Government's decision to proceed with an operation and maintenance agreement, rather than with a concession agreement, for the Project and (ii) those comments from Proponents that were acceptable to the Partnership Committee.

#### **4.4.4 O&M Agreement Discussions**

The RFP contemplated that multiple drafts of the O&M Agreement would be distributed to the Proponents, with each new draft reflecting the comments from the Proponents that the Partnership Committee had accepted. Specifically, the process set forth in the RFP required that each Proponent (i) provide written comments to and markups of three drafts of the O&M Agreement and (ii) meet with the P3 Authority, the P3 Consultants, and the FOMB Representatives on two occasions to walk through and discuss the Proponent's comments to each successive draft of the O&M Agreement. Proponents were asked to submit their markups together with a separate document summarizing their principal comments in order of priority to allow



*Central Aguirre power plant, Salinas, PR.*

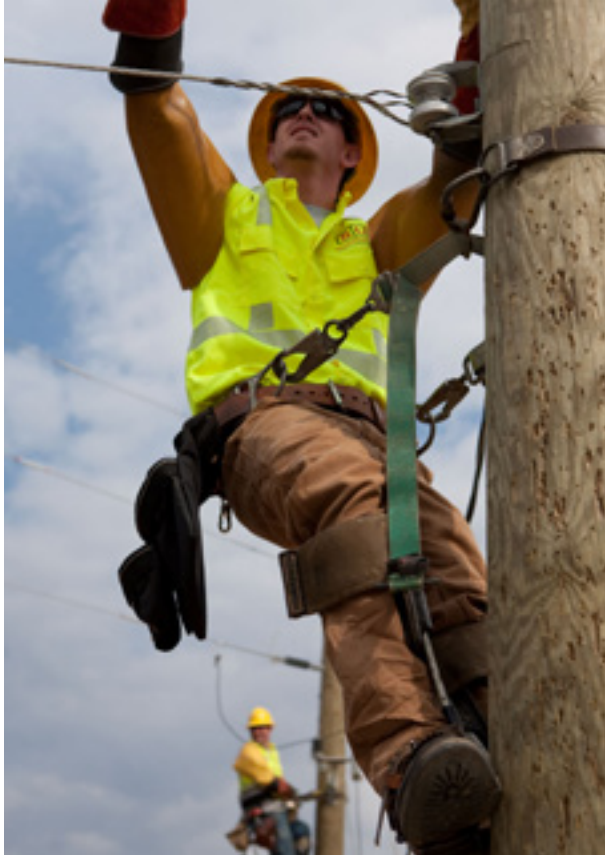
for an efficient review process. In addition, each of the Second Draft O&M Agreement and the Third Draft O&M Agreement was distributed to the Proponents accompanied by a memorandum that summarized the key changes reflected in that draft of the O&M Agreement and, where relevant, included the P3 Authority's rationale for the changes.

On May 24, 2019, the First Draft O&M Agreement was distributed to the Proponents. The First Draft O&M Agreement was prepared taking into account the Proponents' feedback on the Revised O&M Term Sheet and stated concerns with respect to the Title III process, the availability of federal funding, the regulatory framework, and certain other circumstances unique to the Project. The P3 Authority, the Consultants, and the FOMB Representatives met with each of LUMA and PSEG on June 25, 2019 and July 9, 2019, respectively, to discuss their comment to the First Draft O&M Agreement.

On September 4, 2019, the Second Draft O&M Agreement was distributed to the Proponents. This revised draft reflected the comments from Proponents that the Partnership Committee accepted. The P3 Authority, the P3 Consultants, and the FOMB Representatives met with each of LUMA and PSEG on October 10, 2019 to discuss their comment to Second Draft O&M Agreement.

<sup>17</sup> The O&M Agreement provides for a 15-year term, given that in order to be QMA-compliant, the term of the agreement must be the shorter of (i) 30 years and (ii) 80% of the expected useful life of the T&D system.





*Quanta lineworkers maintaining distribution lines.*

Prior to the distribution of the Third Draft O&M Agreement, the P3 Authority, the P3 Consultants, the FOMB Representatives, and AAFAF's legal advisor for the Title III process spoke with each of the Proponents via teleconference on October 17, 2019 to discuss the O&M Agreement in light of the ongoing Title III process. On October 28, 2019, the Third Draft O&M Agreement was distributed to the Proponents. The Third Draft O&M Agreement reflected the comments from Proponents that the Partnership Committee accepted and was intended to be the final draft of the O&M Agreement on the basis of which Proponents were to submit their Definitive Proposals. However, in the period between October 28, 2019 and the Proposal Submission Deadline, the P3 Authority received several RFCs from the Proponents – six sets from LUMA and two from PSEG – with respect to the Third Draft O&M Agreement (each such RFC, a “**Contract RFC**”).

The P3 Authority responded to all of the Contract

RFCs submitted by the Proponents prior to the Proposal Submission Deadline. The P3 Authority also discussed certain additional Contract RFCs raised by PSEG by phone on November 11, 2019. On November 21, 2019, the Final Form of O&M Agreement was distributed to the Proponents. The Final Form of O&M Agreement reflected the clarifications provided by the P3 Authority to the Proponents in response to the Contract RFCs.

The FOMB Representatives participated in all of the meetings with the Proponents to discuss the various drafts of the term sheets and the O&M Agreement. Drafts of the O&M Agreement were also provided to the FOMB's legal advisor for review and comment on August 19, August 22, September 5, and October 31, 2019. The Final Form of O&M Agreement reflects certain comments received from the FOMB's legal advisor on September 4, 2019.

In addition, (i) consistent with Section 8(c) of Act 120, which requires PREB to provide the technical, expert, financial, and human resources assistance requested by the P3 Authority to ensure that each PREPA Transaction succeeds and (ii) pursuant to a memorandum of understanding signed on November 15, 2018 by the P3 Authority, AAFAF, and PREB, which (A) acknowledges the shared interest of the P3 Authority, AAFAF, and PREB in consummating the PREPA Transactions and (B) establishes the terms pursuant to which the P3 Authority and AAFAF may share with PREB certain information related to the PREPA Transactions, the P3 Authority provided PREB the opportunity to review and comment on various drafts of the O&M Agreement.

Specifically, on May 17, 2019, PREB provided feedback on the First Draft O&M Agreement, and on October 7, 2019, the Second Draft O&M Agreement. On October 15, 2019, pursuant to Section 8(c) of Act 120, each of the Proponents met with PREB to discuss the role of PREB under both applicable law and the O&M Agreement. On October 25, 2019, pursuant to its review of prior drafts of the O&M Agreement and its meetings



with the Proponents, PREB provided feedback on the Third Draft O&M Agreement. Accordingly, the Final Form of O&M Agreement reflects certain comments received from PREB.

#### 4.4.5 Submission of Definitive Proposals

The Proponents were required to submit their Definitive Proposals by 12:00 PM AST on the Proposal Submission Deadline. Each of LUMA and PSEG<sup>18</sup> timely submitted its Definitive Proposal. Both Definitive Proposals were substantially complete and consistent with the evaluation criteria included in the RFP. Both Proponents submitted their Definitive Proposals subject to certain changes to the Final Form of O&M Agreement. On December 2, 2019, the P3 Authority circulated a list of questions and comments to each of the Proponents regarding their respective Definitive Proposals.

On December 4, 2019, each of the Proponents participated in in-person meetings to discuss their Definitive Proposals with the P3 Authority, the P3 Consultants, and the FOMB Representatives. On December 5, 2019, the P3 Authority, the P3 Consultants, and the FOMB Representatives met with the Partnership Committee to present and discuss the Definitive Proposals submitted by the Proponents.

On December 6, 2019, each Proponent had the opportunity to present its Definitive Proposal directly to the Partnership Committee, with (i) AAFAF and the P3 Authority, (ii) the Secretary of the Puerto Rico Treasury Department, Francisco Parés Alicea, a member of the P3 Authority Board, (iii) certain Consultants, and (iv) the FOMB Representatives present. The chief executive officer of each of the Proponents (including, in the case of LUMA, the chief executive officer of each of ATCO, Quanta, and IEM) attended the presentations, as well as teams from each of the Proponents. The teams included (i) in the case of LUMA, 19 individuals, including the complete management team

identified in LUMA's Definitive Proposal and (ii) in the case of PSEG, 14 individuals, including certain members of PSEG's senior leadership that would participate in the Front-End Transition Period. During the presentations, each of which took place over the course of approximately four hours, the Proponents responded to detailed questions and comments raised by the Partnership Committee regarding specific elements of their Definitive Proposals.

On December 6, 2019, each Proponent was asked to submit by December 9, 2019 a marked version (with specific language reflected as in-line edits) of the Final Form of O&M Agreement in the form that it would be prepared to execute if it were awarded the O&M Agreement. Each Proponent timely submitted these documents. In addition, LUMA submitted an addenda to its Definitive Proposal improving certain components of its Operational and Financial Proposal. On December 11, 2019, the P3 Authority, the P3 Consultants, and the FOMB Representatives met with LUMA to discuss its markup of the O&M Agreement. A similar meeting was held with PSEG on December 12, 2019.

Following these meetings, the P3 Authority sent certain additional questions and clarifications with respect to the Definitive Proposals to both Proponents. In response, LUMA submitted three additional addenda to its Definitive Proposal, one on each of December 12, December 20, and December 26, 2019, and PSEG submitted two, one on each of December 14 and December 20, 2019. The addenda submitted by each Proponent on December 20, 2019 not only provided responses to additional questions and clarifications sent by the P3 Authority, but also modified certain elements of the Proponent's Definitive Proposal in response to concerns raised by the P3 Authority. Following receipt of the addenda submitted on December 20, 2019, the Partnership Committee began its deliberative process.

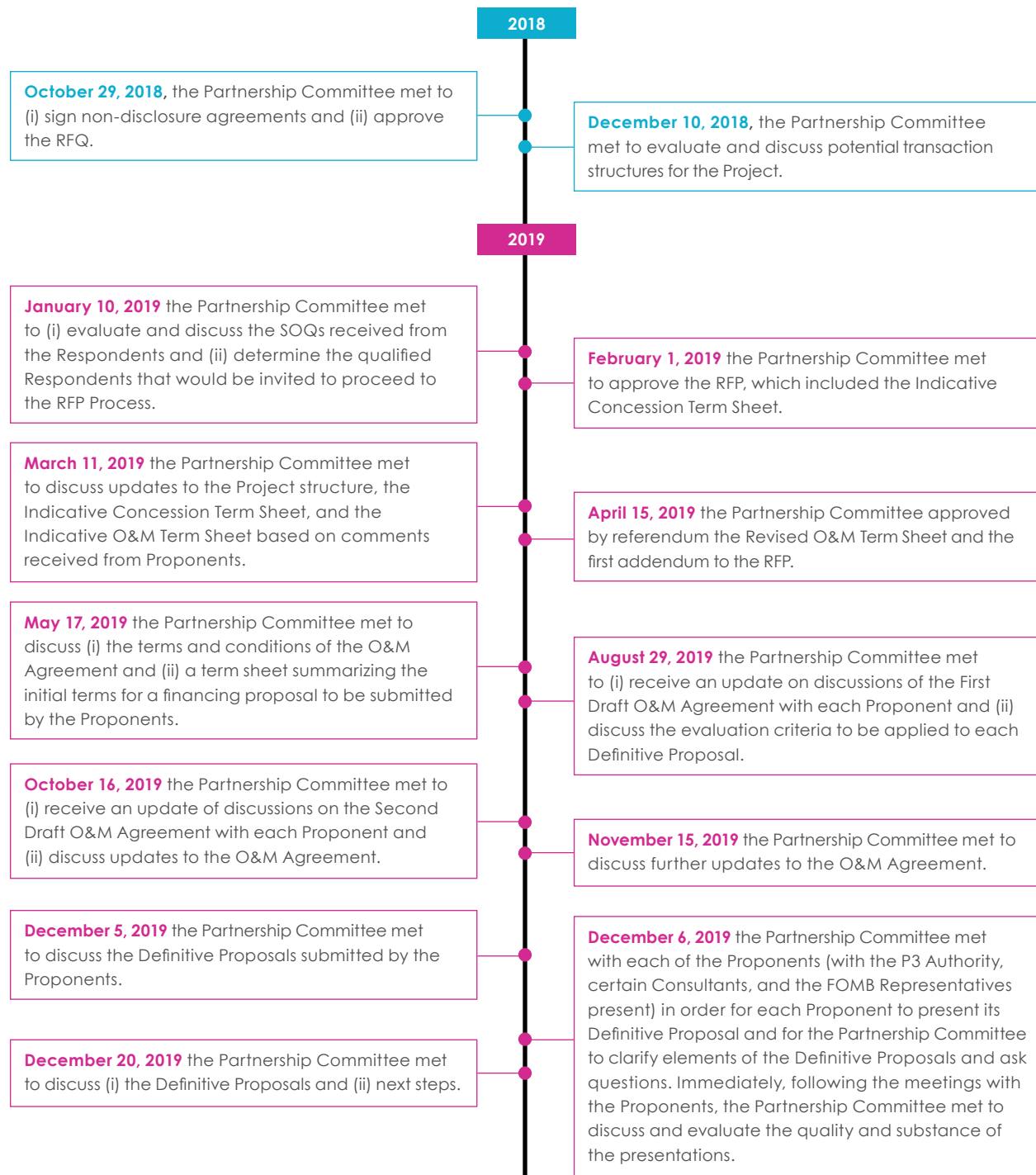
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<sup>18</sup> PSEG submitted its Definitive Proposal as PSEG Puerto Rico LLC, an entity established as an extension of PSEG's existing mainland U.S. utility that would perform the O&M Services if it were awarded the O&M Agreement.



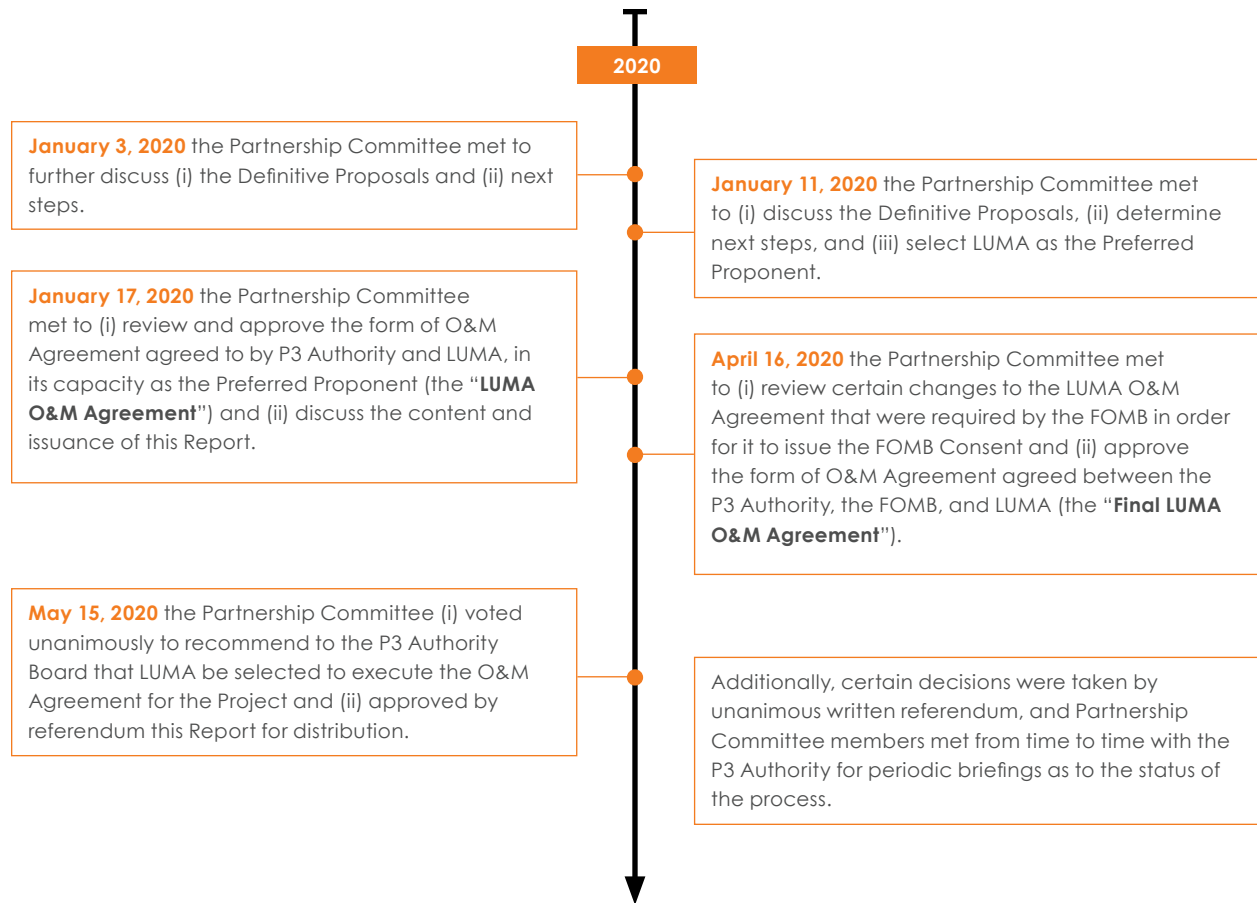
#### 4.4.6 Meetings of the Partnership Committee

In accordance with the requirements of Act 29, Act 120, and the Regulation, the Partnership Committee met on numerous occasions over the course of more than 15 months in connection with the Project, in most cases with the participation of the P3 Authority, the P3 Consultants, and the FOMB Representatives.



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#### 4.4.7 Key Milestones in RFP Process

Table 4 summarizes the key milestones of the RFP Process.

**TABLE 4: RFP PROCESS KEY MILESTONES**

<b>Milestones</b>	<b>Date</b>
RFP issued, including initial draft term sheet, and Data Room access granted	February 1, 2019
Period for due diligence and Q&A process	February through November 2019
Term Sheet discussions held with Proponents	February 26, February 27 & March 4, 2019
Management Presentations and Site Visits	April 2019
Revised draft Term Sheet distributed to Proponents	April 17, 2019
Addendum to RFP issued, including First Draft O&M Agreement	May 24, 2019
Addendum to RFP issued, including the indicative evaluation criteria for the Definitive Proposals	June 14, 2019
Receipt of comment from Proponents to First Draft O&M Agreement	June 14, 2019
O&M Agreement discussions with Proponents	June 25 & July 9, 2019
Addendum to RFP issued, including Second Draft O&M Agreement	September 4, 2019
Receipt of comment from Proponents to Second Draft O&M Agreement	October 1 & October 5, 2019
O&M Agreement discussions with Proponents	October 10, 2019
Distribution of Third Draft O&M Agreement	October 28, 2019
Addendum to RFP issued, including definitive submission instructions for the Definitive Proposals	November 1, 2019
Distribution of Final Form of O&M Agreement	November 17, 2019
Proposal Submission Deadline	November 25, 2019
Meetings with Proponents to address questions/clarifications to Definitive Proposals	December 4, 2019
Proponent presentation of Definitive Proposals to Partnership Committee	December 6, 2019
Receipt of final mark-up of O&M Agreement	December 9, 2019
Meetings with Proponents to address questions/clarifications to Definitive Proposals, as supplemented and/or modified by final markup of O&M Agreement	December 11 & December 12, 2019
Receipt of further written modifications and/or clarifications to Definitive Proposals	December 20, 2019



## ROBUSTNESS OF PROCUREMENT PROCESS

### RFQ Process

5

Respondents participated in the RFQ Process



### RFP Process

4

Proponents qualified to participate in the RFP Process

### Data Room

17,988

Documents related to PREPA (totaling 149,181 megabytes of data), many of which had to be translated into English, uploaded to the Data Room for bidders to review

### Diligence Q&A

700+

Diligence questions asked and answered

### Diligence Meetings

19+

Extensive diligence calls and in-person diligence meetings held with Proponents

### Drafts of Transaction Documents

7+

Drafts of transaction documents distributed to Proponents (including 3 draft term sheets and 4 drafts of the O&M Agreement) for review and comment

### Meetings Regarding Transaction Documents

8

In-person meetings to walk through and discuss Proponent comments to term sheets and successive drafts of the O&M Agreement

### Partnership Committee Meetings

19+

Partnership Committee meetings held to review and discuss elements of the transaction





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## 5. Recommended Award







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## 5.1 Process for Recommended Award

### 5.1.1 Evaluation Criteria

Act 29 and Act 120 require that the Partnership Committee take into account certain specific factors in evaluating responses to the RFP. The Partnership Committee reviewed and evaluated the Definitive Proposals based on the evaluation criteria set forth below, which was developed by

the P3 Authority and the Partnership Committee (with the input of the P3 Consultants and the FOMB Representatives) to meet the objectives of the Project, including those objectives set forth in Act 120 and Act 29.

Table 5 sets forth the evaluation criteria applied to the Definitive Proposals.

**TABLE 5: EVALUATION CRITERIA FOR PROJECT**

#	Component	Score/Weighing
<b>A. QUALIFICATIONS/COMPLIANCE COMPONENTS</b>		
1.	<i>Transmittal Letter</i>	Not scored
2.	<i>Executive Summary and Table of Contents</i>	Not scored
3.	<i>Confirmation of Acceptance of O&amp;M Agreement</i>	Pass/Fail
4.	<i>Bid Security; Other Required Forms and Certifications</i>	Pass/Fail
<b>B. TECHNICAL COMPONENTS</b>		<b>45% Total</b>
5.	<b>Approach to O&amp;M Services</b> The score for this component was based on the thoroughness and viability of the Proponent's proposed approach to providing the O&M Services, the experience and credentials of its proposed management team, its experience in procuring and utilizing federal funding, and its ability to optimize the availability of federal funds for capital investments, among other things.	5%
6.	<b>Front-End Transition Plan</b> The score for this component was based on the thoroughness of the Front-End Transition Plan (including the proposed plan to remediate, repair, replace, and stabilize the T&D System, as may be needed, to enable Operator to perform the O&M Services) and the timeline to achieve the identified key milestones, including the Proponent's proposed target date for the Operator's assumption of operational control of the T&D System (the " <b>Target Service Commencement Date</b> ") and the Proponent's proposed budget, among other things.	25%
7.	<b>Operator Recruitment and Staffing Plan</b> The score for this component was based on the training to be provided to employees, optimization of workforce management, and consistency with the objectives of the Project and the policy underlying Act 120, among other things.	10%



#	Component	Score/Weighing
8.	<p><b>Approach to Performance Metrics</b></p> <p>The score for this component was based on (i) the thoroughness and viability of the Proponent's approach to identifying and prioritizing performance metrics with the goals and objectives of the Government as stated in the RFP, (ii) the Proponent's views and proposed approach to the related calculation methodology of Incentive Fee, and (iii) the Proponent's proposed approach to engaging with PREB and other applicable regulatory bodies in revision and finalization of the approach to the Performance Metrics.</p> <p>This component included the Proponent's (i) maximum proposed Incentive Fee amount per period from July 1 through June 30 for each year commencing on the date on which the Operator assumes operational control of the T&amp;D System (such date, the "<b>Service Commencement Date</b>," and each such period a "<b>Contract Year</b>") based on the indicative Performance Metrics included in <u>Annex VIII</u> of the O&amp;M Agreement; (ii) maximum proposed Incentive Fee amount per Contract Year based on the Proponent's proposed changes to the indicative Performance Metrics included in <u>Annex VIII</u> of the O&amp;M Agreement; and (iii) a detailed explanation of the Proponent's views on how the agreed-upon maximum annual Incentive Fee should reduce or otherwise change the proposed Fixed Fee.</p>	5%
C.	<b>OPERATIONAL AND FINANCIAL COMPONENTS</b>	<b>50% Total plus 5% Bonus</b>
9.	<p><b>Operational and Financial Proposal</b></p> <p>The score for this component was based on (i) the net present value of the financial elements of the financial proposals, including, among others, the proposed Fixed Fee for each year of the O&amp;M Agreement and the proposed maximum Incentive Fee for each year of the O&amp;M Agreement, (ii) the indicated amounts of the relevant operational proposals, including, among others, the proposed weekly amount of certain liquidated damages, (iii) the Proponent's proposed caps on liability (i.e., higher points awarded for higher Operator liability caps and lower Owner liability caps), and (iv) the proposed Target Service Commencement Date.</p>	50%
10.	<p><b>Optional Debt Financing Plan</b></p> <p>The score for this component was based on the amount, tenor, terms, and conditions precedent of any proposed debt financing the Proponent elected to submit ("the <b>Debt Financing Plan</b>").</p>	5% bonus
D.	<b>PRESENTATION COMPONENT</b>	<b>5% Total</b>
11.	<p><b>Presentation of Definitive Proposals to the Partnership Committee</b></p> <p>The score for this component was based on the oral presentation of the Proponent's Definitive Proposal to the Partnership Committee. The presentation allowed Proponents to support the contents of their Definitive Proposal, explaining and/or clarifying any particular or significant elements related thereto.</p>	5%

The Technical Proposals comprised 45% of the Proponents' total score. For the Technical Proposals, the RFP required each Proponent to provide detailed plans and proposals with respect to:

- performing the O&M Services;
- transitioning and handing over services and other rights and responsibilities with respect to the T&D System during the period between execution of the O&M Agreement and the Service Commencement Date, consistent with any requirements for the Front-End Transition

Period under the Final Form of O&M Agreement (i.e., the Front-End Transition Plan);

- staffing and training of employees and subcontracting of services, among other things (i.e., the Operator Recruitment and Staffing Plan); and
- the development of the Performance Metrics to be identified and proposed by the Operator during the Front-End Transition Period, which Performance Metrics the Operator must meet or exceed to earn the Incentive Fee.



The Operational and Financial Proposals comprised 50% of the Proponents' total score. For the Operational and Financial Proposals, the RFP required each Proponent to propose certain operational and financial terms and conditions to be included in the O&M Agreement, including:

- the net present value of the Fixed Fee and the Incentive Fee over the term of the O&M Agreement;
- the proposed amounts of certain operational elements, including the estimated Front-End Transition Service Fee and the estimated Back-End Transition Service Fee;
- the dollar value of certain caps on liability included in the O&M Agreement, including the cap on the Operator's liability to the Owner, the cap on the guarantee to be provided by the parent company of the Operator (the "**Parent Guarantee**") and the cap on the liquidated damages payable by the Operator to the Owner in the event that (i) the Service Commencement Date is delayed three months beyond the Target Service Commencement Date proposed by the Proponent as a result of failure of Operator to meet certain conditions precedent and (ii) such failure is not caused by any force majeure event or Owner's fault; and
- the proposed Target Service Commencement Date.

The Legal Proposal was graded on a pass/fail basis and required Proponents to submit a letter confirming their acceptance of the Final Form of O&M Agreement, save for the terms and conditions contemplated by the Operational and Financial Proposal to be filled into the agreement, immaterial amendments to incorporate party names, details, and execution mechanics, and subject to further discussion on a limited number of material comments.

The presentation component was scored based on each Proponent's presentation of its Definitive Proposal to the Partnership Committee on December 6, 2019, including the Proponent's responses to specific questions and comments raised by the Partnership Committee during the presentations.

The RFP indicated that the Partnership Committee would make a determination as to the most favorable Definitive Proposal for the Project based on pricing considerations as well as other non-price factors, including the Proponent's responsiveness to PREPA's long-term goals for the T&D System, as evidenced in its Technical Proposal and Legal Proposal.

### 5.1.2 Determination of Preferred Proponent

On December 16, 2019, the P3 Authority met with the P3 Consultants and the FOMB Representatives via videoconference to discuss the Definitive Proposals. On December 20, 2019, the Partnership Committee met with the P3 Authority, the P3 Consultants, and the FOMB Representatives via videoconference to review and discuss the P3 Consultants' and the FOMB Representatives' assessment of the Definitive Proposals. On January 3, 2020, and January 11, 2020, the Partnership Committee met with the P3 Authority to discuss the procurement process for the Project.

On January 11, 2020, the Partnership Committee voted by referendum, pursuant to Act 29, Act 120, and the Regulation (including Section 5.1 thereof), to designate LUMA as the Preferred Proponent to engage in exclusive discussions and negotiations with the P3 Authority in connection with the Project pursuant to Section 5.1 of the Regulation. Each Partnership Committee member submitted its score of the Definitive Proposals, and such scores were averaged to determine a final score for each Definitive Proposal. The Partnership Committee granted LUMA a higher average score. On January 12, 2020, LUMA was notified in writing of its selection as the Preferred Proponent.



Table 6 below breaks down each Proponent's aggregate score for each criterion.

**TABLE 6: BREAK DOWN OF PROPONENT SCORES**

#	Component	LUMA	PSEG
<b>A.</b>	<b>QUALIFICATIONS/COMPLIANCE COMPONENTS</b>		
1.	Transmittal Letter and Executive Summary and Table of Contents	Submitted as required.	Submitted as required.
2.	Confirmation of Acceptance of O&M Agreement, Bid Security, and Other Required Forms and Certifications	Proponent submitted comments to the Final Form of O&M Agreement.	Proponent submitted comments to the Final Form of O&M Agreement.
<b>B.</b>	<b>TECHNICAL COMPONENTS</b>		
3.	Approach to O&M Services, Front End Transition Plan, Operator Recruitment and Staffing Plan, and Approach to Performance Metrics.	<b>42.22 / 45</b>	<b>37.17 / 45</b>
<b>C.</b>	<b>OPERATIONAL AND FINANCIAL COMPONENTS</b>		
4.	Operational and Financial Proposal	<b>45.32 / 50</b>	<b>42.26 / 50</b>
5.	Optional Debt Financing Plan	Proponent indicated that it is willing to provide debt financing subject to terms and conditions to be agreed.	Proponent declined to submit Optional Debt Financing Plan.
<b>D.</b>	<b>PRESENTATION COMPONENT</b>		
6.	Presentation of Definitive Proposals to the Partnership Committee	<b>4.80 / 5</b>	<b>4.40 / 5</b>
<b>Total Score</b>		<b>92.34 / 100</b>	<b>83.83 / 100</b>

With respect to the Debt Financing Plan criteria, the criteria was ultimately not scored. Neither Proponent provided a Debt Financing Plan with sufficient detail to merit allocating points. One of the Proponents made no submission in this regard, and the other Proponent submitted a letter that did not include sufficient detail regarding the Debt Financing Plan for it to be evaluated as part of its Definitive Proposal.

With respect to the presentation component, although both Proponents provided an overview of and support for the contents of their Definitive Proposal and responded to questions and comments raised by the Partnership Committee with respect to particular elements of the Definitive Proposal, LUMA's presentation was scored higher by the Partnership Committee.

- LUMA's presentation to the Partnership Committee provided a clear picture of LUMA's vision for the Project, including (i) a team of best-in-class companies organized for the sole purpose of participating in the Project, (ii) a proven plan to achieve key deliverables during the Front-End Transition Period based in part on extensive diligence conducted during the RFP Process, (iii) a detailed approach for establishing a long-term local solution for Puerto Rico, and (iv) a commitment to the people of Puerto Rico, as exemplified by the comprehensive hiring strategy during the Front-End Transition Period and the proposed investment in a new training facility for line-workers. In addition, the key members of the complete management team identified in LUMA's Definitive Proposal were present and participated. LUMA's presentation also included plans and materials developed



specifically for the Project, including a video describing LUMA's clear vision for the transformation of PREPA and outlining the experience and expertise that would be brought to bear to execute on that vision.

- The Other Proponent's presentation described how it had been successful in providing similar services in another jurisdiction and included participation by certain senior leadership for the Front-End Transition Period. In addition, the Other Proponent's presentation included a plan for additional due diligence to be conducted during the Front-End Transition Period. The Other Proponent showed a video that highlighted the Other Proponent's work in Puerto Rico in response to Irma and Maria.

### 5.1.3 Recommendation to Award the O&M Agreement

As detailed in Section 5.1.2 hereof (*Determination of Preferred Proponent*), the Partnership Committee granted LUMA's Definitive Proposal a higher average score overall. This was the result of LUMA's higher score on both the Technical Proposal and Operational and Financial Proposal. Although all of the elements of LUMA's Operational and Financial Proposal (including LUMA's proposed liability caps) were deemed to be more favorable in the aggregate to the Government and the people of Puerto Rico than those included in the Other Proponent's, the proposed Service Fee

initially included in LUMA's Definitive Proposal had a higher net present value over the Contract Term than the Other Proponent's. Accordingly, the Partnership Committee sought to negotiate with LUMA, as the Preferred Proponent, to achieve a reasonable Service Fee that was more favorable to the people of Puerto Rico.

On January 15, 2020, the P3 Authority, the P3 Consultants, and the FOMB Representatives met with LUMA to review LUMA's proposed Service Fee and seek to finalize a form of O&M Agreement. During the discussions on January 15, 2020, LUMA agreed to lower its Service Fee in each Contract Year, resulting in a reduction of \$164 million in the net present value of Service Fee over the Contract Term. In addition, during the meetings, the LUMA O&M Agreement (*i.e.*, a form of O&M Agreement acceptable to the Partnership Committee, P3 Authority, and LUMA) was agreed.

On January 17, 2020, the Partnership Committee met to review and approve the LUMA O&M Agreement agreed between the P3 Authority and LUMA, as the Preferred Proponent. After approving the LUMA O&M Agreement, the Partnership Committee recommended that the P3 Authority obtain the Required Approvals.

### 5.1.4 Key Milestones in Evaluation Process

Table 7 summarizes the key milestones of the evaluation process.

**TABLE 7: EVALUATION PROCESS KEY MILESTONES**

Milestones	Date
Partnership Committee voted to designate a Preferred Proponent	January 11, 2020
LUMA notified of selection as the Preferred Proponent	January 12, 2020
Meeting with LUMA to negotiate Service Fee and O&M Agreement	January 15, 2020
Partnership Committee approval of LUMA O&M Agreement	January 17, 2020



## 5.2 Key Considerations for Recommended Award

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As detailed in Section 5.1.1 hereof (*Evaluation Criteria*), the Definitive Proposals were evaluated on the basis of three elements:

- the Technical Proposal;
- the Operational and Financial Proposal; and
- the Legal Proposal.

The three elements were designed to enable the Partnership Committee to select the Proponent best suited to fulfill the Project objectives. Based on its evaluation of the Definitive Proposals pursuant to the evaluation criteria, the Partnership Committee determined that LUMA clearly demonstrated its ability and commitment to transform the T&D System into a modern, sustainable, reliable, efficient, cost-effective, and resilient electric system for the people of Puerto Rico. Sections 5.2.1 (*Technical Considerations*), 5.2.2 (*Operational and Financial Considerations*), and 5.2.3 (*Legal and Contractual Considerations*) hereof describe the key technical, operational and financial, and legal considerations, respectively, for the Recommended Award and provide the rationale for the Partnership Committee's determination that the Project be awarded to LUMA.

### 5.2.1 Technical Considerations

The Technical Proposals, reflecting 45% of the overall weighted scores, were evaluated on the basis of four main components: (i) approach to performing the O&M Services; (ii) proposal for the Front-End Transition Plan; (iii) proposal for the Operator Recruitment and Staffing Plan; and (iv) approach to the Performance Metrics. LUMA's Technical Proposal presented a specifically tailored approach to the T&D System that demonstrated a clear understanding of the challenges and opportunities of the Project.

Below is a brief description of the Technical Proposals submitted by each Proponent:

- From a technical perspective, both Proponents are qualified to operate the T&D System. However, the Proponents took different approaches in their Technical Proposals. LUMA showcased an understanding of the current situation and issues faced by PREPA and Puerto Rico and provided an approach tailored to addressing the issues, while the Other Proponent emphasized its in-house expertise.
- Each section of LUMA's Technical Proposal summarized the lessons learned from the due diligence the LUMA team had performed over the prior 12 months in a sub-section entitled "What We Found" and then described how these findings would influence LUMA's approach to various elements of the service. The Other Proponent provided limited detail with respect to the specific approach it would take in the PREPA context.
- Based on its findings, LUMA proposed improvements in design resiliency standards, storm hardening practices, control centers, vegetation management, advanced metering infrastructure, public lighting, and fleet solutions to rebuild and upgrade the performance of the electric grid and customer service. The Other Proponent described how it provides similar services in another jurisdiction but did not provide a detailed plan as to how it would modify its approach for Puerto Rico, which was notable given that there are substantial differences between the jurisdiction in which the Other Proponent operates and Puerto Rico.
- Both Proponents generally laid out a similar timeline for the Front-End Transition Plan. However, LUMA's Front-End Transition Plan was fully developed and included the specific hours by major task to be performed during the period. The Other Proponent provided a more general Front-End Transition Plan and



indicated that the details of the plan would be determined during the Front-End Transition Period.

- LUMA's Technical Proposal included a detailed, 30-page, 11-month timeline with key milestones and fully-developed implementation plans, including specific budgets and identified leads for over 40 work-streams to be completed during the Front-End Transition Period. The Other Proponent did not include a similar level of detail with respect to the Front-End Transition Period.
- In addition to providing names and resumes for over 50 members of the Front-End Transition Period team and a significant subcontractor matrix listing nearly 30 subcontractors, LUMA also identified "Special Teams" with responsibilities in key topic areas, including system remediation, performance metrics, system operation principles, federal funding, non-federal funding, initial budgets, employee transition, integrated resource planning, and the provision of services during the transition of the T&D System from the Operator back to the Government upon the expiration or early termination of the Contract Term (the "**Back-End Transition Period**"). The Other Proponent did not include a similar level of detail with respect to the Front-End Transition Period.
- Both Proponents have adequately qualified staff (including Spanish speakers), sound approaches to recruiting, and plans to integrate the PREPA workforce into all levels of the organization. However, LUMA provided a more detailed Operator Recruitment and Staffing Plan that identified the specific individuals who would be filling each role.
- LUMA provided its complete management team and details regarding the identity and use of subcontractors. In addition, LUMA indicated a focus on leveraging current PREPA employees and a compelling leadership succession plan. The Other Proponent deferred naming its management team and the development of other human resource policies until the Front-End Transition Period.



General view of central Costa Sur power plant, Guayanilla, PR.



- LUMA generally accepted the Performance Metrics set out in the RFP with minor exceptions, while the Other Proponent proposed a different approach to the methodology, incentive calculation, and timelines for achievement. Both parties understood that the performance metrics are subject to negotiation and PREB approval during the Front-End Transition Period.
- LUMA's Technical Proposal provided a thorough approach to working with PREB and other regulatory bodies, including a detailed process and suggested timelines.

Overall, LUMA's Technical Proposal clearly demonstrated the extensive due diligence that it had performed on the T&D System, PREPA, and Puerto Rico, and the deep knowledge that it obtained as a result. This more clearly demonstrated that LUMA was ready to immediately start working on transforming the T&D System on day one of the Front-End Transition Period and made LUMA's Technical Proposal stand out. In addition, the extensive due diligence conducted by LUMA led the Partnership Committee to believe that LUMA was less likely to discover new information after it was awarded the Project that could either lead to delays in the transformation process or present renegotiation risk.

### **Approach to O&M Services**

The P3 Authority required Proponents to include a detailed plan describing the Proponents' respective approaches to performing the O&M Services in a manner that results in the Project objectives and performance requirements set forth in the RFP and the O&M Agreement being met or exceeded. As relates to the approach to O&M Services, LUMA provided a higher level of detail in its Definitive Proposal that reflected a tailored approach to the PREPA context. LUMA identified and provided a complete management team while the Other Proponent deferred naming its management team until the Front-End Transition Period. In addition, because LUMA included plans to create (i) a detailed program to maximize

the pace and magnitude of increased solar generation, with the stated goal of identifying opportunities that can be built in 18 to 24 months, and (ii) a transmission expansion plan that will play a key role in prioritizing which mini-grids are developed first, LUMA demonstrated a deep understanding of the IRP and GMP and a strong commitment to comply with and achieve the renewable energy targets set forth therein.

Finally, LUMA brought to bear experience securing and obtaining federal funds through IEM, its prime subcontractor and a member of the consortium. Given IEM's experience with specific federally funded programs, experience in Puerto Rico, and integration with the LUMA team, LUMA demonstrated that, together with IEM, it would be better equipped to navigate and carry out the process for obtaining and implementing federal funding than any other third-party contractor. LUMA's Technical Proposal specifically indicated that IEM would be essential to a successful transition of the T&D System as envisioned in the GMP.

Although the Other Proponent's Definitive Proposal demonstrated relevant previous experience in O&M Services, the Other Proponent's Definitive Proposal only included, in some instances, limited detail with respect to the specific approach it would take in the PREPA context. For example, because the Other Proponent's Definitive Proposal did not name its management team, with the exception of the President and the Senior Vice President of Support Services, the Partnership Committee was not able to effectively assess the team's qualifications. Furthermore, although the Other Proponent demonstrated relevant expertise in carrying out federally funded projects, the Other Proponent, as compared to LUMA, did not provide evidence of having experience in procuring and obtaining federal funds. Finally, although the Other Proponent's experience was clearly relevant to the type and nature of O&M Services that were being requested pursuant to the O&M Agreement, the Other Proponent did not provide a detailed plan as to how it would modify its approach to O&M



Services in the one jurisdiction where it had such experience to take into account the substantial differences that exist between the circumstances it inherited in that jurisdiction and those existing in Puerto Rico.

### **Front-End Transition Plan**

The RFP stated that Definitive Proposals should include a detailed plan describing the Proponent's approach to the transition and handover of services prior to the assumption of operational control of the T&D System by the winning Proponent. LUMA's Front-End Transition Plan was complete and highly detailed. It (i) contained all the key components, (ii) incorporated significant detail around the plans, timeline, total hours per task and per person, and resources required to achieve key milestones, and (iii) included fully-developed implementation plans with specific budgets. Furthermore, LUMA also provided a detailed list, including names and resumes of over 50 key members of the transition team, and a significant subcontractor matrix listing nearly 30 subcontractors by functional group. LUMA also demonstrated a commitment to providing emergency response for the upcoming hurricane season even prior to assuming operational control of the T&D System. The Other Proponent provided only a high-level approach to its Front-End Transition Plan and stated that specific plans would be developed during the Front-End Transition Period.

LUMA's detailed project schedule was over 30 pages long, covering all major categories of work to be completed during the Front-End Transition Period and including a complete list of work streams for each such category of work. In addition, LUMA outlined nine special teams that it would form to perform the work streams during the Front-End Transition Period if it were selected as the winning Proponent. These special teams included the teams that would be responsible for, among other things, preparing the following items, which must be developed during the Front-End Transition Period under the O&M Agreement: (i) the short-term plan detailing the scope, resources, timelines,

milestones, cost estimates, and achievement criteria required to address immediate deficiencies and enable the Operator to perform O&M Services in compliance with the standards set forth in the O&M Agreement (the "**System Remediation Plan**"), (ii) the final Performance Metrics, (iii) the proposed budgets for the initial Contract Years (the "**Initial Budgets**"), (iv) the IRP, and (v) various other plans and manuals. LUMA's Technical Proposal provided that these special teams will be led by experienced utility/technical experts that may also serve as functional area leads, thus eliminating duplication of work and increasing efficiency.

Quanta's commitment to build and manage, at its cost and expense, the Lineworkers College, also set LUMA apart from the Other Proponent. Through the Lineworkers College, Quanta promises to create significant value for the benefit of Puerto Rico. In particular, LUMA and the people of Puerto Rico will benefit from the curriculum, specialization, and



*Northwest Lineman College, the largest accredited lineworker college in the United States.*





An instructor looks on as a Northwest Lineman College student practices safe lineworker techniques.

skill that Quanta provides through the Northwest Lineman College, a Quanta-owned accredited lineworkers college that develops electric power, gas distribution, and telecommunications service skills, and currently trains over 9,000 technical field workers per year at four campuses across the U.S. The Lineworkers College will be critical for improving workforce development and retention by providing local best-in-class training programs and facilities. In addition, the Lineworkers College will be a critical component of LUMA's holistic approach to improving emergency response preparedness, given that emergency preparedness training can be integrated into the mindsets of the local lineworkers at the beginning of their training. This last point is of critical importance in light of the earthquakes that hit Puerto Rico in December 2019 and January 2020 and future hurricane seasons.

Finally, in the supplement to its Definitive Proposal submitted on December 12, LUMA identified a number of near term opportunities – i.e., “early wins” – that would allow LUMA to deliver meaningful change early in the Contract Term, which also set LUMA's Technical Proposal apart from the Other Proponent's. The near term opportunities identified by LUMA are outlined below.

**“Break Loose” FEMA Funding** – LUMA stated that it would, among other things, (i) review current project worksheets for federal funding in order to identify areas of quick improvement (including developing cost estimates and designating quick projects) and (ii) re-establish full processes and relationships with FEMA and COR3, breaking loose FEMA funding (in addition to that already obligated when LUMA signs the O&M Agreement) in order to allow for immediate work on critical capital projects.

#### **Emergency Preparedness and Response**

– LUMA indicated that it would, among other things, provide skilled emergency management resources to assist PREPA in reviewing and executing their emergency response drills and plans ahead of and during the next hurricane season. In addition, Quanta committed to making emergency resources available for restoration, if needed, during the Front-End Transition Period while working within the Edison Electric Institute's mutual aid processes. Specifically, LUMA highlighted that it would: (i) set up the emergency operation plan quickly and push for a fully PREB-compliant emergency operation center (“EOC”) before the start of the 2020 hurricane season; (ii) take a more active role in management of emergency preparedness and response (including by (A) assessing the leadership and management of the EOC, (B) deploying emergency managers and sector chiefs to ensure command and control, (C) planning restoration, (D) securing resources, (E) getting mutual aid, and (F) acquiring contractors and coordinating restoration activities); (iii) design and participate in table-top emergency response exercises (including hurricane scenario exercises prior to the 2020 hurricane season); and (iv) put in place direct mutual aid agreements with ATCO and Quanta.



**Lineworkers College** – LUMA stated that Quanta would do the following with respect to the Lineworkers College, among other things: (i) break ground on the facility for the college and (ii) begin enrolling students in classes. This facility would be open to any and all utility workers thus allowing for a sharing of best-practices and learning, which has been historically difficult for PREPA workers.

**“Jump start” Selected Early Win Reliability Programs** – LUMA indicated that it would, among other things, initiate (i) improvements in street lighting, (ii) vegetation management, and (iii) the implementation of a smart meter program to help with fast restoration and improved billing.

**“Fast Track” Voice of Customer and Other Customer Service Programs** – LUMA stated that it would, among other things, (i) help PREPA implement cloud-based call center technology and (ii) launch voice of customer efforts (including by (A) surveying customers to understand satisfaction levels, (B) developing a comprehensive initial employee satisfaction survey and planning for enterprise-wide participation, (C) mapping the customer journey by customer class to identifying gaps in existing processes, (D) evaluating existing customer service performance metric data collection and capabilities, (E) assessing credit and collection processes and methods of debt recovery, and (F) evaluating and developing a plan for digital delivery of customer experience).

### **Operator Recruitment and Staffing Plan**

The RFP stated that Proponents should provide a detailed description of the Proponents’

approach to staffing and training employees and subcontracting services. LUMA identified and provided a complete management team while the Other Proponent chose to defer naming its management team and the development of other human resource policies until the Front-End Transition Period. LUMA provided a well thought-out staffing plan that (i) included an appropriate use and identification of subcontractors and, a focus on leveraging current PREPA employees, and (ii) described a compelling leadership succession plan. Furthermore, LUMA committed to interviewing during the Front-End Transition Period all PREPA staff that wished to join LUMA’s workforce – which was viewed as an effective way to familiarize PREPA employees with LUMA and provide a better platform for a smooth integration of the two organizations – and offering positions to a large majority of such staff.

In addition, certain elements of LUMA’s organizational structure underscored LUMA’s commitment to delivering on the detailed action plans described in its approach to performing the O&M Services, setting it apart from the Other Proponent. For instance, the LUMA organizational structure includes the Utility Transformation Department, a department that will be dedicated to the transformation of the T&D System and responsible for the technical implementation of new initiatives (including distributed and renewable generation, interconnection standards, micro-grid and mini-grid design, and renewable energy), thus further evidencing LUMA’s commitment to complying with and achieving renewable energy targets as part of performing the O&M Services. Similarly, because LUMA’s organizational structure includes the Safety, Health, Environmental and Quality Department, a department that will include a dedicated environmental team and will be responsible for ensuring that all other departments improve compliance with environmental standards, LUMA also demonstrated a strong commitment to creating a culture of environmental awareness as part of performing the O&M Services.





*PREPA air unit team lift a pole in a vacant lot, Las Marías, PR.*

### **Approach to Performance Metrics**

The RFP asked Proponents to provide (i) a detailed description to their approach to the development of customer service, technical and operational, and financial Performance Metrics to be identified and proposed by the Proponents during the Front-End Transition Plan, (ii) views and proposed approach to the Incentive Fee, and (iii) Proponents' commitment to the Performance Metrics. The Performance Metrics ultimately applied to the Operator will be finalized by the parties during the Front-End Transition Period and subject to approval by PREB. Accordingly, the extent to which a Proponent accepted the Performance Metrics defined in the Final Form of O&M Agreement was indicative of the Proponents' willingness to work collaboratively with PREB.

Regarding the approach to the Performance Metrics, LUMA and the Other Proponent differed in their approach to responding to the requests included in the RFP. LUMA essentially accepted the Performance Metrics as defined in the Final Form of O&M Agreement, proposing only a few minor deviations and offering reasonable suggestions where improvement could be made. In addition, LUMA's Technical Proposal provided a thorough approach to working with PREB and other regulatory bodies, which included a detailed process and suggested timelines, and indicated a willingness to work collaboratively with the P3 Authority during the Front-End Transition Period.

The Other Proponent provided differing views on the Performance Metrics and the calculation of the Incentive Fee from what was included in the Final Form of O&M Agreement. Specifically, the Other Proponent did not accept the methodology for calculating the Operator's Incentive Fee included in the O&M Agreement and instead suggested a "Year One and Year Two – Incentive Methodology" premised on the assumption that reliable data for purposes of establishing performance metrics would not be available for the first two years of the O&M Agreement. Furthermore, the Other Proponent proposed the inclusion of a minimum performance level line that achieved target levels in 20 years, extending beyond the 15-year Contract Term, rather than the ten-year timeline included in the O&M Agreement.

### **5.2.2 Operational and Financial Considerations**

The RFP required each Proponent to provide certain operational and financial terms and conditions to be included in the O&M Agreement as part of their Operational and Financial Proposals, as follows:

- the Target Service Commencement Date;
- an estimate of the Front-End Transition Service Fee;
- the proposed Fixed Fee for each year of the O&M Agreement and the proposed maximum Incentive Fee for each year of the O&M Agreement;



- an estimate of the Back-End Transition Service Fee;
- the fees payable to the Owner or the Operator, as applicable, in the event the O&M Agreement is terminated prior to the end of the term (the "**Termination Fee**"); and
- certain Operator liability caps.

The Operational and Financial Proposals comprised 50% of the overall weighted scores.

The Partnership Committee determined that LUMA's Definitive Proposal (reflecting the reduced Service Fee) provided the better Operational and

Financial Proposal, given that the figures proposed by LUMA were more favorable to the Government in the majority of categories. In addition, two of the categories where LUMA's Definitive Proposal appears less favorable, the Front-End Transition Service Fee and the Back-End Transition Service Fee, were solely estimates based on projected number of man hours. Because these estimates could end up being higher or lower, these categories were given less weight.

Table 8 illustrates the values for the Proponents' Operational and Financial Proposals. Figures highlighted in green are the ones that are more advantageous to the Government.

**TABLE 8: OPERATIONAL AND FINANCIAL PROPOSALS**

#	Component	Concept	LUMA	PSEG
1.	Estimated Front-End Transition Service Fee*	Operator's estimate of cost for providing services during the Front-End Transition Period.	<b>\$76 million</b>	<b>\$45 million</b>
2.	Net Present Value Service Fee	The net present value of the Fixed Fee and the Incentive Fee over the 15-year term of the O&M Agreement.	<b>\$1,352 million</b>	<b>\$1,382 million</b>
3.	Operator Termination Fee**	Fee payable to the Operator in the event the O&M Agreement is terminated prior to the end of the term of the agreement in the event of certain limited circumstances not due to Operator's fault.	<b>\$158 million to \$104 million</b>	<b>\$125 million</b>
4.	Operator Damage Cap	The maximum amount of damages payable by the Operator to PREPA under the O&M Agreement.	<b>\$10 million</b>	<b>\$15 million</b>
5.	Operator Liability to Owner	The maximum liability of the Operator to PREPA under the O&M Agreement.	<b>\$105 million</b>	<b>\$50 million</b>
6.	Parent Guarantee	The amount of the guarantee to be provided by the parent company of the Operator.	<b>\$105 million</b>	<b>\$30 million</b>
7.	Delay Liquidated Damages Cap	The maximum penalty amount payable to PREPA for failure to handover T&D System by the Target Service Commencement Date due to the Operator's fault.	<b>\$40 million</b>	<b>\$3 million</b>
8.	Gross Negligence Cap	The maximum amount of Operator's liability to PREPA for losses due to Operator's gross negligence.	<b>\$105 million</b>	<b>\$30 million</b>
9.	Estimated Back-End Transition Service Fee*	Operator's estimate of cost for providing services during the Back-End Transition Period.	<b>\$6 million</b>	<b>\$3 million</b>

\* The Front-End Transition Service Fee and the Back-End Transition Service Fee are solely estimates.

\*\* LUMA proposed a range for the Operator Termination Fee that started at \$158 million and decreased to \$104 million over the course of the 15-year term. Whether LUMA's or PSEG's Operator Termination Fee is more advantageous to the Government depends on the Contract Year in which termination occurs, if applicable, and thus a more advantageous number has not been indicated for item three in the table above.



### 5.2.3 Legal and Contractual Considerations

The RFP required Proponents to accept the Final Form of O&M Agreement, save for the terms and conditions to be proposed by each Proponent in the Operational and Financial Proposal component of its Definitive Proposal, immaterial amendments to incorporate party names and the like, and subject to further discussion on a limited number of material comments. In light of the extensive review and comment process with respect to the O&M Agreement, as described in Section 4.4.4 hereof (*O&M Agreement Discussions*), the expectation was that Proponents would have very limited and specific comments to the Final Form of O&M Agreement, if any. In light of this, the Legal Proposal was not scored.

Nonetheless, as part of their Definitive Proposals, each of the Proponents provided comments to the O&M Agreement in the form of a memorandum highlighting more critical concerns and then submitted markups with specific language. Although neither Proponent accepted the Final Form of O&M Agreement as drafted, LUMA had significantly fewer comments to the contract. LUMA raised only three issues of importance from the Government's perspective but otherwise accepted the provisions of the O&M Agreement as originally drafted. The Other Proponent's contract markup was much more extensive and included a number of items that shifted risk to the Government.

The O&M Agreement contained certain core elements:

the standard of care for the Operator's performance of the O&M Services;

the Front-End Transition Period and activities to be conducted during this period and the conditions to the handover of the T&D System to the Operator;

events of default and additional termination rights; and

the indemnity from Operator to Owner.

Set forth below is a summary description of the provisions of each of these elements of the O&M Agreement as well as the main comments of each of LUMA and the Other Proponent to such provisions.

#### **Standard of Care**

The O&M Agreement requires the Operator to perform the O&M Services in such a manner as to comply with (i) applicable law, (ii) the practices, methods, and acts that are generally recognized and accepted by companies operating in the U.S. mainland and/or island electric transmission and distribution business, (iii) applicable equipment manufacturer's specifications and reasonable recommendations, (iv) applicable insurance requirements, and (v) certain other standards, terms and conditions under the O&M Agreement (the "**Contract Standards**"). While the Proponents generally accepted the Contract Standards as the standard of care required by the O&M Agreement, they emphasized throughout the discussions with respect to the draft O&M Agreements that certain components of the T&D System and the manner in which it is operated did not currently comply with the Contract Standards. To address this issue, the O&M Agreement includes the concept of a short-term System Remediation Plan. The System Remediation Plan is (A) prepared by the Operator with input from the Owner and the P3 Authority during the Front-End Transition Period and (B) subject to approval by PREB. The Contract Standards are tied to the System Remediation Plan, such that the Operator is not responsible or liable for any matter that is the subject of the System Remediation Plan during the period that the Operator is repairing or improving the T&D System in accordance with the System Remediation Plan.



The Proponents took a different approach with respect to the System Remediation Plan in their Definitive Proposals. LUMA's Definitive Proposal accepted the System Remediation Plan as a short-term plan to be developed prior to the Service Commencement Date. The Other Proponent viewed the System Remediation Plan as a long-term capital plan to be executed in three phases, the latter two of which would not be developed until after the Service Commencement Date. In addition, the Other Proponent initially required that (i) budgets (and staffing levels) for each year of the term be sufficient for the Operator to implement the System Remediation Plan and (ii) failure to satisfy this obligation would be an event of default that gave rise to an Operator termination event. Following multiple discussions with the Other Proponent as to its comments to the O&M Agreement, the Other Proponent indicated that it would be willing to remove the termination right in the event that any budget did not include funding sufficient to implement the System Remediation Plan. However, the consequences of (A) the P3 Authority and the Other Proponent failing to agree on the content or timing of the second and third phases of the System Remediation Plan and (B) the unavailability of funding for those two phases remained ambiguous.

Given that the Operator's liability to the Owner under the O&M Agreement is limited with respect to matters that are the subject of the System Remediation Plan while the Operator is implementing the System Remediation Plan, the development and duration of the System Remediation Plan is a critical element of the O&M Agreement and one that differentiates the Definitive Proposals. Implementing the System Remediation Plan in phases over multiple years as proposed by the Other Proponent had the potential to significantly limit the Operator's liability to the Owner over the Contract Term and effectively exempt the Operator from performing the O&M Agreement in accordance with the Contract Standards. In addition, allowing the Operator to develop the latter phases of the System Remediation Plan while the Operator is already performing the

O&M Services, as proposed by the Other Proponent, results in inherent uncertainty and shifts significant operational and financial risk from Operator to the Owner.

### ***Front-End Transition Period***

The O&M Agreement specified certain conditions precedent to Service Commencement Date, including (i) the completion by the Operator of the Front-End Transition Plan, (ii) receipt of an order from the court presiding over the Title III process (the "**Title III Court**") authorizing (A) PREPA to enter into the O&M Agreement and (B) portions of the plan of adjustment that are otherwise necessary for the parties to perform under the O&M Agreement (the "**Title III Approvals**"), and (iii) the preparation by the Operator, with the input of the Owner and the P3 Authority, of (A) the Initial Budgets, (B) the final Performance Metrics, (C) the System Remediation Plan, and (D) certain other plans contemplated under the O&M Agreement. In addition, the Initial Budgets, the final Performance Metrics, and the System Remediation Plan must be submitted to PREB for its approval prior to the Service Commencement Date.

The Proponents generally accepted that the Operator would be responsible for the preparation of certain items prior to the Service Commencement Date and that a number of such items would be subject to PREB approval. LUMA did not propose any modifications to the Operator's responsibility to prepare the Initial Budgets, the Performance Metrics, and the System Remediation Plan or to PREB's approval of such items. The Other Proponent, however, did not agree initially that PREB should have sole discretion over the approval of the Initial Budgets, the Performance Metrics, and the System Remediation Plan. The Other Proponent initially proposed that any such plan approved by PREB must be acceptable to the Operator in its sole and absolute discretion and, if not, the Operator would be able to terminate the O&M Agreement prior to the Service Commencement Date. Following a series of meetings with and requests for clarification from the P3 Authority, the P3 Consultants, and the



FOMB Representatives, the Other Proponent indicated in writing that it would be willing to remove the concept of its sole and absolute discretion over the Initial Budgets, the Performance Metrics, and the System Remediation Plan, provided that the O&M Agreement was revised to include an active participation by PREB in the process of developing these items and regular dialogue between the Operator and PREB regarding the Operator's comments and suggestions. In addition, the Other Proponent provided that if the Operator and PREB failed to agree, PREB should direct the P3 Authority to terminate the O&M Agreement.

Although the Other Proponent appeared willing to negotiate with respect to these items following extensive discussion and multiple requests for clarifications, the Other Proponent's required level of PREB engagement in the development of these items appeared inconsistent with PREB's role as an independent regulator. Further, the significant consequences of a termination of the contract in the event that the Operator and PREB were unable to agree were a potential additional

limit on the exercise of PREB's regulatory authority that PREB may have been unwilling to accept. Finally, the Other Proponent marked the contract to provide that the Operator's preparation and submission to the P3 Authority and PREB of (i) the Initial Budgets, (ii) the Performance Metrics, and (iii) the back-end transition plan covering the transition and handover of the O&M Services at the termination of the O&M Agreement would not be conditions precedent for which the Operator was responsible for ensuring satisfaction but rather mutual conditions for which both the Operator and the Owner were responsible. The effect of this change was that liquidated damages for delay in achieving the Target Service Commencement Date would not apply to these items, thus eliminating the financial incentive for the Operator to timely agree on these items.

#### ***Events of Default and Additional Termination Rights***

The O&M Agreement provides that certain breaches by the parties of their obligations under the O&M Agreement constitute events of default that result



*ATCO team working to restore essential energy services.*



in a right to terminate the O&M Agreement. In addition, the O&M Agreement includes additional termination events arising under certain limited circumstances, such as in the event of a sale of the T&D system or an extended force majeure event that materially interferes with or increases the cost of the O&M Services. With a view towards reducing the risk of (i) early termination following the extensive RFP Process or (ii) renegotiation of the O&M Agreement while the Operator is performing the O&M Services (in which renegotiation the Operator would have significant leverage), the Government sought to ensure that the O&M Agreement did not include extensive termination rights.

LUMA generally accepted all of the events of default and additional termination rights proposed by the Government. The Other Proponent had a number of comments to these provisions. First, the Other Proponent proposed to include several additional termination events that would benefit the Operator. Second, the Other Proponent broadened existing events of default and termination events. Finally, the Other Proponent shortened the cure periods for other events of default and termination events. The cumulative effect of all of the Other Proponent's comments was that the Operator's ability to terminate or renegotiate the O&M Agreement was significantly expanded in comparison to LUMA's Definitive Proposal.

In addition, the Other Proponent required the O&M Agreement to include language providing for the Government to assume the Operator's known and unknown liabilities at the end of the O&M Agreement, regardless of whether such liabilities were incurred pursuant to the Operator's activities, approved budgets or otherwise. From the Government's perspective, this was problematic because there was no way for the Government to assess the quality or quantum of such potential liabilities, which shifted significant risk to the Government under the O&M Agreement.

## **Indemnity**

The O&M Agreement requires (i) a Parent Guarantee and (ii) indemnification by the Operator against losses incurred in connection with (A) breaches by the Operator of its representations, warranties, and covenants under the O&M Agreement and (B) negligence or willful misconduct of the Operator and its affiliates and representatives. As described in Section 5.2.2 hereof (*Operational and Financial Considerations*), the Proponents were required to provide as part of their Definitive Proposals the dollar value of certain caps on liability included in the O&M Agreement, including the cap on the Operator's liability to the Owner and the cap on the Parent Guarantee.

The Other Proponent's Parent Guarantee cap of \$30 million and Operator liability cap of \$50 million was significantly lower than LUMA's Parent Guarantee cap of \$105 million, which matched LUMA's cap on Operator's liability to Owner. This meant that under the Other Proponent's Definitive Proposal, the Government would recoup in the aggregate close to four times less in the event of indemnification for breaches of the O&M Agreement. Most importantly, the Other Proponent's lower cap also suggested less willingness by the Other Proponent to stand behind its performance obligations as compared to LUMA.

## **Other Aspects of the O&M Agreement**

From a contractual perspective, there were other material differences between the Definitive Proposals as relates to the terms, conditions, and legal and contractual risk that each Proponent was willing to bear, as follows:

- First, although the addendum submitted by the Other Proponent on December 20, 2019 indicated that the Other Proponent would be willing to drop certain points that had the effect of allocating greater legal and contractual risk to the Government (including rights to approve initial budgets and Performance Metrics), there remained ambiguity as to certain of the





General view of Guajataca Dam following projects to repair the damage caused to it by Maria, Quebradillas, PR.

changes to the O&M Agreement proposed by the Other Proponent, such that the Partnership Committee would only have been able to fully assess the Other Proponent's position by seeing a further round of specific contract language.

- Second, there were a number of other items that, although less critical, resulted in the O&M Agreement proposed by the Other Proponent being less favorable to the Government than the O&M Agreement proposed by LUMA, including, among others, the obligation of the Government to assume more material liabilities, greater restrictions on the ability of the Government to terminate the Operator for non-performance, shorter grace periods on certain events of default by the Owner, expanded definition of "Pre-Existing Environmental Liability", Parent

Guarantee limited to payment obligations, and dispute resolution in Delaware courts rather than Puerto Rico courts.

Overall, the Other Proponent's Definitive Proposal, as compared to LUMA's Definitive Proposal, (i) involved significantly more extensive and material changes and (ii) had the cumulative effect of (A) shifting additional risk and cost to the Government and (B) limiting the rights of the Government vis-à-vis the Operator under the O&M Agreement. In light of this, the Partnership Committee determined that getting to an agreed form of O&M Agreement with the Other Proponent would require substantial negotiation and it would be difficult to predict the outcome or success of such negotiations.

In light of the above, LUMA's higher technical and financial scores and the fact that LUMA had effectively accepted the Final Form of O&M Agreement proposed by the Government except for the limited number of changes, the Partnership Committee decided to produce a final form of O&M Agreement for LUMA and to engage in exclusive negotiations with LUMA as the Preferred Proponent.

Following the Partnership Committee's selection of LUMA as the Preferred Proponent pursuant to Section 5.1 of the Regulation, the P3 Authority, the P3 Consultants, and the FOMB Representatives met with the Preferred Proponent to discuss the Preferred Proponent's (i) Operational and Financial Proposal, which LUMA agreed to reduce as detailed in Section 5.1.3 hereof (*Recommendation to Award the O&M Agreement*), resulting in (A) savings of \$164 million over the net present value of its initially proposed Service Fee over the Contract Term, and (B) a net present value of close to \$30 million less than that of the Other Proponent, and (ii) final comments to the O&M Agreement, which were limited and primarily in the nature of clean up and clarification changes, all of which were acceptable.



## 5.3 Additional FOMB Comments to the O&M Agreement and Supplemental Agreement

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### 5.3.1 Additional FOMB Comments to the O&M Agreement

Following the Partnership Committee's approval of the LUMA O&M Agreement, the P3 Authority shared the LUMA O&M Agreement to the FOMB in order for the FOMB to formally review the contract and provide the FOMB Consent.

Although FOMB Representatives had participated in the various steps throughout the procurement process, the FOMB believed that in light of the status of the negotiations with respect to PREPA's Title III case, PREPA might not be able to obtain the required approvals from the Title III Court that are a condition to the Service Commencement Date (i.e., the Title III Approvals) within the timeframe that the FOMB deemed reasonable for turnover of the T&D System to the Operator. Given the intent to have the Operator take control of the T&D System within a year (or as soon as possible thereafter) and the importance of the energy reforms included in the Certified Fiscal Plan, the FOMB understood that it would not be beneficial to delay the Service Commencement Date in the event that the Title III Approvals were not obtained by the time all other conditions precedent to the Service Commencement Date were achieved.

The FOMB brought this issue to the attention of the P3 Authority and LUMA and requested that amendments be made to the LUMA O&M Agreement to address potential delays in the Title III case and allow the Operator to commence operations even if the Title III Approvals had not been obtained. Although the P3 Authority and LUMA believed that the LUMA O&M Agreement, as drafted, provided sufficient flexibility to address

the Title III-related issues without implementing the amendments suggested by the FOMB,<sup>19</sup> the FOMB indicated that amending the LUMA O&M Agreement to resolve the FOMB's concern would be necessary to obtain the FOMB Consent.

Accordingly, over the period from the end of January through the end of March, the P3 Authority coordinated discussions among the FOMB, LUMA, the P3 Authority, and certain of the Consultants in order to amend the LUMA O&M Agreement to provide for the Service Commencement Date to occur notwithstanding the Title III Approvals not having been obtained. Ultimately, the P3 Authority, the FOMB, and LUMA agreed to address the FOMB's concerns by (i) making certain limited adjustments to the LUMA O&M Agreement and (ii) negotiating a supplemental agreement (the "**Supplemental Agreement**") that:

- becomes effective only if PREPA has not received the Title III Approvals when all other conditions precedent to LUMA's takeover of the T&D System have been met under the O&M Agreement; and
- terminates as soon as PREPA receives the required Title III Approvals, or in the event that PREPA has not received the Title III Approvals within 18 months of the Supplemental Agreement becoming effective.

If PREPA receives the Title III Approvals on or prior to the time all other conditions precedent to LUMA's takeover of the T&D System have been met, the Supplemental Agreement will never become effective.

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<sup>19</sup> Under the terms of the LUMA O&M Agreement, the earliest date that the O&M Agreement can be terminated absent breach by the Owner for failure to achieve the Title III Approvals is 21 months from the date that the O&M Agreement becomes effective, thus providing a long period of time to obtain the required approvals.



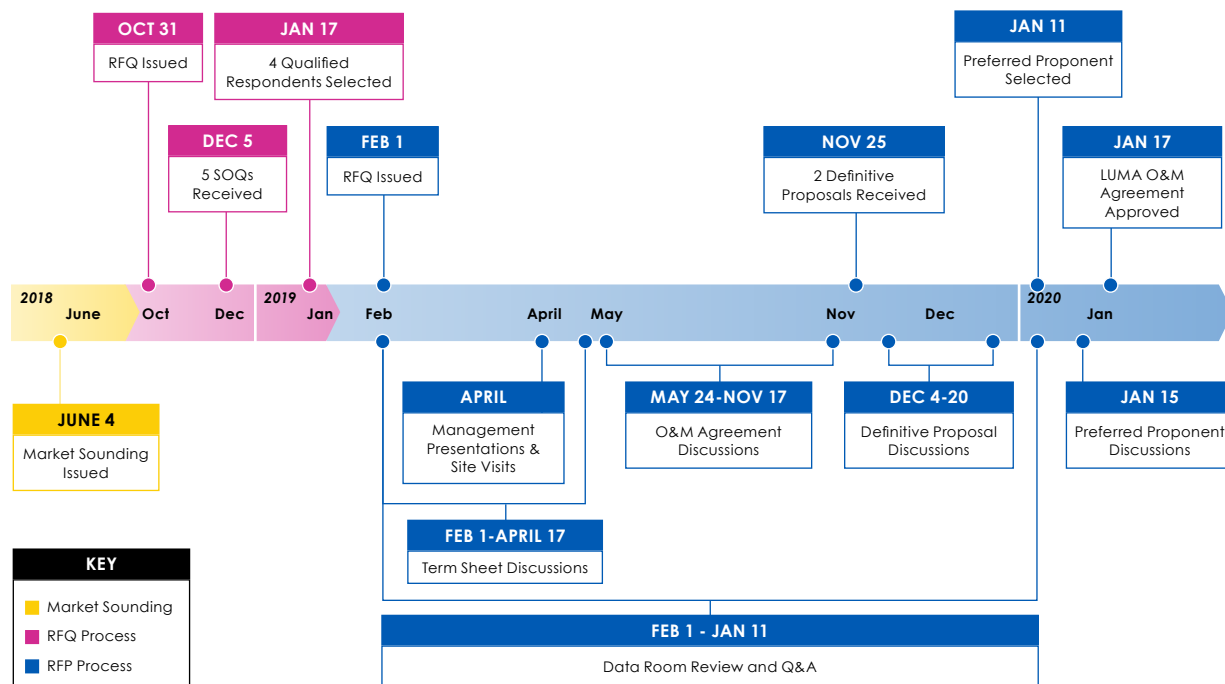
On April 10, 2020, the FOMB, the P3 Authority, and LUMA finalized the Supplemental Agreement and the corresponding changes to the O&M Agreement.

On April 16, 2020, the Partnership Committee met to approve (i) the Supplemental Agreement and (ii) the final O&M Agreement as agreed between the P3 Authority, the FOMB, and LUMA (i.e., together, the “Final LUMA O&M Agreement”).<sup>20</sup>

### 5.3.2 Supplemental Agreement

As described in Section 5.3.1 hereof (*Additional FOMB Comments to the O&M Agreement*), if PREPA has not received the Title III Approvals when all other conditions precedent to Operator’s takeover of the T&D System have been met, the Supplemental Agreement will go into effect.<sup>21</sup>

#### TIMELINE OF PROCUREMENT PROCESS

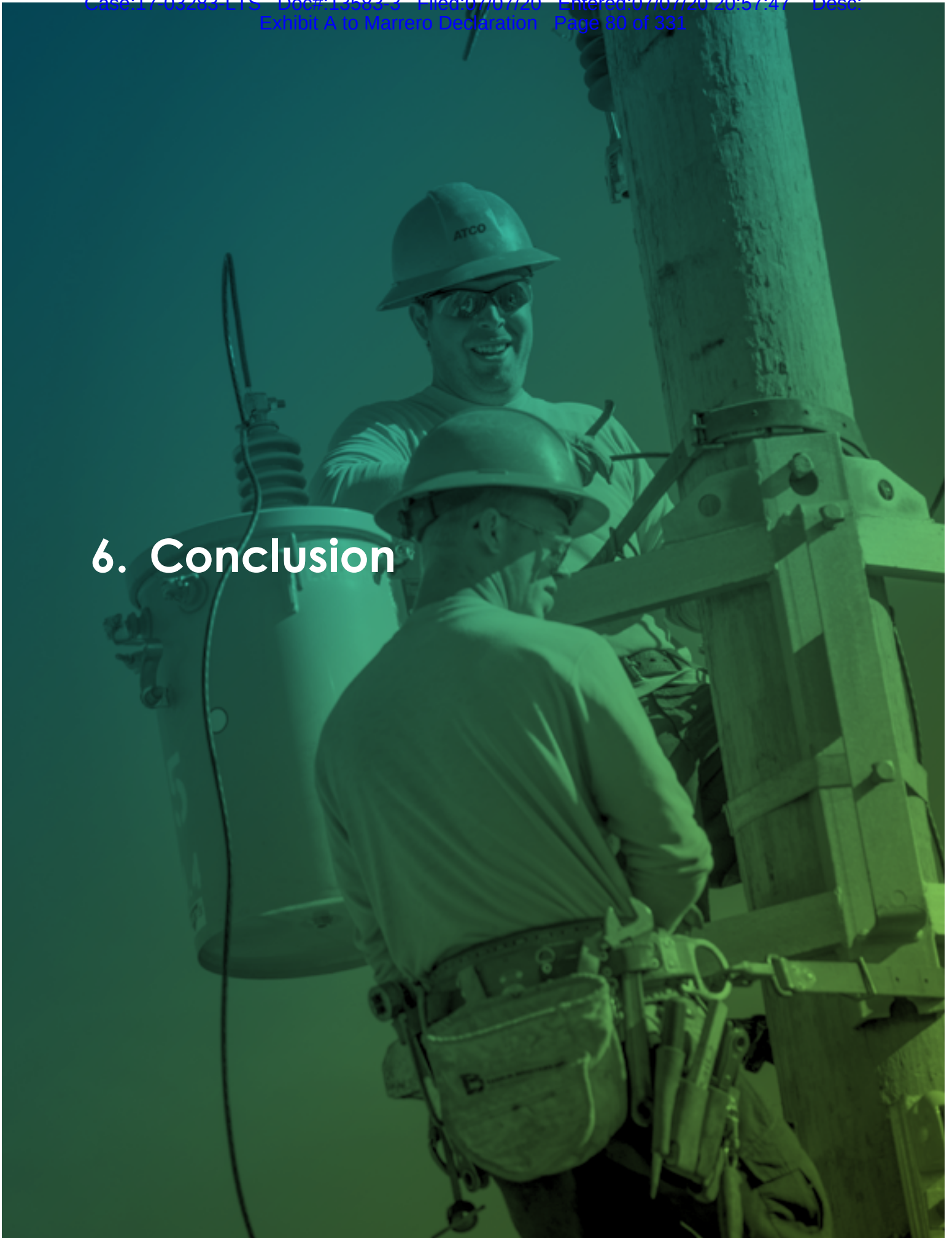


<sup>20</sup> A summary of the O&M Agreement is attached as Exhibit F hereto (*Summary of O&M Agreement*).

<sup>21</sup> A summary of the Supplemental Agreement is attached as Exhibit G hereto (*Summary of Supplemental Agreement*).



## 6. Conclusion







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PREPA serves approximately 1.5 million customers and employs approximately 6,000 people in Puerto Rico. As the sole utility for the island of Puerto Rico, PREPA's purpose is to provide the people of Puerto Rico with reliable electric power, assist the sustainable development of Puerto Rico, and contribute to the general welfare as a service provider and employer on the island. In September 2017, when hurricanes Irma and Maria hit Puerto Rico in the span of two weeks, PREPA's infrastructure suffered mass destruction. In the years leading up to Irma and Maria, PREPA had become increasingly vulnerable to natural disasters for several reasons, including, among others, (i) political interference, (ii) lack of managerial continuity and long-term planning, (iii) poor and deferred maintenance of the T&D infrastructure, and (iv) a fiscal and economic crisis that led to unmanageable debt obligations and inadequate levels of infrastructure investment.

In light of these challenges, following the destruction caused by hurricanes Irma and Maria, the Government developed and began implementing a comprehensive and visionary plan intended to transform Puerto Rico's energy sector. The objective of this PPP process carried out by the P3 Authority, PREPA, and the Partnership Committee was to realize the Government's long-term goals of (i) upgrading Puerto Rico's electric system to be more resilient against future natural disasters and (ii) revitalizing Puerto Rico's economy, in each case for the benefit of the people of Puerto Rico.

To achieve these goals, the Government had to first seek to (i) modernize the legislative framework for Puerto Rico's electric sector, (ii) secure federal disaster assistance funding to help rebuild Puerto Rico in the aftermath of Irma and Maria, and (iii) address Puerto Rico's unprecedented fiscal and economic crisis. It then had to design and implement an iterative, transparent, and competitive process to identify and select a private partner to operate PREPA's T&D assets and obtain buy-in from multiple stakeholders.

Through the enactment of Act 120 in June 2018, the Government laid down the legal framework for its stated goal of transforming Puerto Rico's energy system into a modern, sustainable, reliable, efficient, cost effective, and resilient one. The very same month, the Government launched the T&D transformation process with a market sounding that indicated substantial interest in the Project.

On October 31, 2018, the P3 Authority commenced the process to identify a private partner for the Project. Nine months later, on November 25, 2019, the Partnership Committee received two Definitive Proposals from two Proponents qualified to operate the T&D System. Pursuant to RFP, the Definitive Proposals received were comprised of three main components:

- a Technical Proposal highlighting the Proponents plans with respect to certain technical elements of the O&M Services;
- an Operational and Financial Proposal presenting the Proponent's proposed terms and conditions for certain operational and financial provisions of the O&M Agreement; and
- a Legal Proposal confirming acceptance of the form of O&M Agreement.

On December 6, 2019, each Proponent presented its Definitive Proposal to the Partnership Committee, the P3 Authority, the P3 Consultants, and the FOMB Representatives. On January 11, 2019, after nearly two months of review and evaluation of the Definitive Proposals based on the evaluation criteria designed to meet the Government's objectives with respect to the transformation of the T&D System, the Partnership Committee voted to designate LUMA as the Preferred Proponent.

LUMA's Definitive Proposal not only complied with the requirements of Act 29, Act 120, the Regulation, and the RFP, but also was awarded the higher average score in each of its Technical Proposal, its Operational and Financial Proposal, and its





*PREPA employee performing tree pruning work, Guaynabo, PR.*

Legal Proposal based on the evaluation criteria developed to meet the objectives of the Project.

- LUMA's Technical Proposal presented a tailored approach to the O&M Services that indicated a strong understanding of the PREPA context. In particular, LUMA (i) provided an in-depth approach to performing the O&M Services, including federal funding management; (ii) included a fully developed Front-End Transition Plan with a proposed timeline and an Operator Recruitment and Staffing Plan that identified the specific individuals who would be filling each role; (iii) generally accepted the Government's approach to the Performance Metrics and indicated a willingness to work collaboratively with PREB; and (iv) committed to (A) develop best-in-class training programs, including the building and managing, at its cost and expense, of the Lineworkers College in Puerto Rico, and (B) help PREPA become a self-sustaining standalone utility by the end of the 15-year Contract Term, which would eliminate the need for successive operation and maintenance contracts at the end of the term.
- Following discussions with LUMA resulting in a significant reduction in the net present value of LUMA's Service Fee over the Contract Term, LUMA's Operational and Financial Proposal represented the lower net present calculation of the Service Fee over the Contract Term. In addition, LUMA's Operational and Financial Proposal included higher liability caps in the event of performance failures by the Operator, which demonstrated a greater willingness by LUMA to stand behind its contractual commitments.



- LUMA agreed to a form of the O&M Agreement that was the closest to the Final Form of O&M Agreement included in the RFP, which (i) resulted in less risk and cost transfer from the Operator to the Government and (ii) preserved the rights of the Government vis-à-vis the Operator included in the Final Form of O&M Agreement.

Following an extensive review of the Definitive Proposals, the Partnership Committee determined that LUMA's Definitive Proposal was superior in respect of each of its technical, operational and financial, and legal components and represents the better alternative to achieve the Government's stated goal of transforming the T&D System for the benefit of the people of Puerto Rico. In particular, based on LUMA's Definitive Proposal and consistent with the five core pillars for permanent reconstruction set forth in the GMP, the Partnership Committee determined that LUMA was better suited to bring to fruition the Government's goal of transforming the T&D System into one that is customer-centric, resilient, reliable, affordable, and sustainable.

In conclusion, the PPP process for the Project was carried out over the course of more than 18 months and involved (i) robust participation by a number of highly qualified private sector participants, (ii) extensive due diligence of the T&D assets, (iii) multiple opportunities for comment on and discussion of the proposed transaction structure and the O&M Agreement, both with private sector participants and with various government entities and other stakeholders, including the FOMB and PREB, (iv) an extensive and in-depth assessment and analysis of the Definitive Proposals by the Consultants, (v) the opportunity for Proponents to present and discuss their Proposals in person to the Partnership Committee, the P3 Authority, various Consultants, and the FOMB Representatives, (vi) thorough review of the Definitive Proposals and the Consultant's assessment thereof by the P3 Authority, the Partnership Committee, and the FOMB, (vii) the scoring of the Definitive Proposals by the Partnership Committee based on clearly-articulated evaluation criteria to achieve the Government's objectives for the Project, and (viii) extensive and in-depth discussions with the FOMB to address the FOMB's concerns regarding Title III-related issues. As such, the Partnership Committee unanimously recommends to the P3 Authority Board that LUMA be awarded the O&M Agreement.



Approved and received by the Partnership Committee Members:



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**Omar Marrero**

*Executive Director and Chairman*  
Financial Advisory Authority and Fiscal Agency of  
Puerto Rico



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**Jose Ortiz**

*Executive Director*  
Puerto Rico Electric Power Authority



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**Ralph Kreil**

*President Board of Directors*  
Puerto Rico Electric Power Authority



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**Edison Avilés**

*President*  
Puerto Rico Electric Power Commission



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**Ottmar Chavez**

*Executive Director*  
Central Office for Recovery and Reconstruction





## Exhibit A: Defined Terms





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## DEFINED TERMS

For purposes of this Report, the following defined terms will have the meanings used in the sections indicated below.

Term	Section	Term	Section
428 Guide	3.1.4	Nixon	2
AAFAF	2	Number of Deaths	3.1.2
Act 120	1	O&M Agreement	1
Act 29	1	O&M Services	1
Act 29 Regulation	3.1.3	Operational and Financial Proposal	1
Aerostar	3.1.3	Operator	1
ATCO	1	Operator Recruitment and Staffing Plan	1
Back-End Transition Period	5.2.1	OSHA	3.1.2
Back-End Transition Service Fee	1	Other Proponent	1
Baker Donelson	2	Owner	1
CAIDI	3.1.2	P3 Authority	1
Certified Fiscal Plan	3.2	P3 Authority Board	1
Citigroup	2	P3 Consultants	2
Cleary	2	Parent Guarantee	5.1.1
Consultants	2	Partnership Committee	1
Contract RFC	4.4.4	Performance Metrics	1
Contract Standards	5.2.3	PFI	3.1.3
Contract Term	1	PMA	2
Contract Year	5.1.1	PowerAdvocate® Message	4.4.1
COR3	3.1.4	PPP	1
Costa Sur Power Station	1	PREB	2
CPM	2	Preferred Proponent	2
Data Room	4.4.2	PREPA	1
Debt Financing Plan	5.1.1	PREPA Transaction	3.1.4
Definitive Proposal	1	PRHTA	3.1.3
Duke	1	PRPA	3.1.3
Energy Policy Act	3.1.4	Project	1
EOC	5.2.1	PROMESA	1
Exelon	1	Proponent	1
Expert Panel	3.1.3	Proposal Submission Deadline	4.4.1
FEMA	3.1.2	PSEG	1
Final Form of O&M Agreement	4.4.1	QMA	4.4.3
Final LUMA O&M Agreement	4.4.6	Quanta	1
First Draft O&M Agreement	4.4.1	Recommended Award	2
Fixed Fee	1	Regulation	2
FOMB	1	Report	2
FOMB Consent	2	Required Approvals	2
FOMB Representatives	2	Respondent	1
Fort McMurray Project	1	Revised O&M Term Sheet	4.4.1
Front-End Transition Period	1	RFC	4.3



Term	Section
Front-End Transition Plan	1
Front-End Transition Service Fee	1
FTI	2
GAR	4.1
GMP	3.1.4
Government	1
IEM	1
Incentive Fee	1
Indicative Concession Term Sheet	4.4.1
Indicative O&M Term Sheet	4.4.1
Initial Budgets	5.2.1
Irma	1
IRP	3.1.4
KPI	4.4.3
Legal Proposal	1
Legislature	2
Lineworkers College	1
LMM Airport Project	3.1.3
LMM Airport Agreement	3.1.3
Lost Time Cases	3.1.2
LUMA	1
LUMA O&M Agreement	4.4.6
Management Presentation	4.4.2
Maria	1
MB	4.4.2
Metropistas	3.1.3

Term	Section
RFP	1
RFP Process	1
RFP-RFC	4.4.2
RFQ	1
RFQ Process	1
RFQ-RFC	4.3
Safety-Related Incidents	3.1.2
Second Draft O&M Agreement	4.4.1
Service Commencement Date	5.1.1
Service Fee	1
Site Visits	4.4.2
SOQ	1
Supplemental Agreement	5.3.1
System Remediation Plan	5.2.1
T&D	1
T&D System	1
Target Service Commencement Date	5.1.1
Technical Proposal	1
Termination Fee	5.2.2
Third Draft O&M Agreement	4.4.1
Title III	1
Title III Approvals	5.2.3
Title III Court	5.2.3
Toll Roads Agreement	3.1.3
Toll Roads Project	3.1.3





## **Exhibit B: Advantages of a Third-Party T&D Operator of the Puerto Rico T&D System**





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## THE ADVANTAGES OF A THIRD-PARTY T&D OPERATOR OF THE PUERTO RICO T&D SYSTEM

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The Advantages of a Third-Party Operator of the Puerto Rico T&D System



## I. Executive Summary

The purpose of this document is to provide an overview of the benefits from selecting a third-party transmission and distribution system (“T&D System”) operator for the Puerto Rico electric grid assets through a competitive solicitation process. Given the myriad issues facing the electric system in Puerto Rico, a third-party operator will facilitate the separation of the generation and T&D System assets, ensure the most qualified operator and enable the transition to a safer, modernized, decarbonized, more resilient and reliable grid. The existing legal framework in Puerto Rico establishes an effective path to select the optimal third-party operator.

Over the past decade, Puerto Rico Electric Power Authority (“PREPA”) has faced a number of safety, reliability, operational and financial challenges. A dependence on oil-fired generation, aging infrastructure and significant damage created by hurricane events have hindered PREPA’s ability to deliver safe, affordable, reliable power to ratepayers; PREPA has also been criticized for poor management. It has become clear that a complete transformation of the Puerto Rico electric system and PREPA is essential to bring safe, reliable, modern T&D System services to Puerto Rico ratepayers.

In order to drive this transformation, the Government of Puerto Rico enacted The Transformation Act, Act 120-2018 (“Act 120”) to establish the legal framework for the transformation of the Puerto Rico electric system including incentivizing private participation through the formation of public-private partnerships (“PPPs”) to be implemented by the Puerto Rico Public-Private Partnership Authority (the “Authority”). Act 120 stipulates that PREPA can sell or transfer its generation assets or transfer/delegate any of its operations, functions or services through a PPP (a “PREPA Transaction”). In conjunction, Act 120 empowers the Authority to (i) implement and execute PREPA Transactions, (ii) determine which PREPA functions, services and/or facilities would be best suited for PPPs and (iii) determine which specific PREPA generation assets to sell or transfer in separating the T&D System business from the generation business, detailed below.<sup>1</sup>

One of the first initiatives the Authority undertook after Act 120 was enacted, was the separation of the T&D System from the existing legacy generation assets (“Generation”) and to begin the

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<sup>1</sup> See Section 1.1 to 1.4 of Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Partnership Contracts and Sale Contracts for the Transformation of the Electric System Under Act No. 120-2018, as Amended. (March 8, 2019)



The Advantages of a Third-Party Operator of the Puerto Rico T&D System



search for a qualified third-party operator.<sup>2</sup> The goal of separating the T&D System operations from the Generation is to (i) ensure the most qualified operator for the T&D System and (ii) create a competitive dynamic within each function to attract qualified, industry-leading respondents.

In running the T&D process, the Authority prequalified four Respondents during the RFQ process: Duke Energy Corporation (“Duke”), Exelon Corporation (“Exelon”), PSEG Services Corporation (“PSEG”) and the Quanta Consortium<sup>3</sup> (“Quanta”) (collectively the “Bidders”). The comprehensive process run by the Authority involved several key stakeholders and their advisors and included a rigorous review of all respondent submittals, collaborative drafting of key project documents driven at aligning compensation and incentives with assumed risks and, most importantly delivering reliable, safe power to Puerto Rico ratepayers.

The Authority-led competitive solicitation process to separate the generation and T&D operations of PREPA (the “T&D Solicitation Process”) has made progress toward accomplishing the objectives of Act 120-2018 by selecting qualified Bidders with the financial capability and who are capable of operating and transforming the Puerto Rico electric grid into a modern, sustainable, reliable, efficient and resilient system. As this document details, there is significant value in bringing the T&D System to an operating level consistent with mainland U.S. utilities relative to the incremental cost of compensating a third-party operator. That net value will flow directly to ratepayers in the form of significant improvements to service reliability and customer satisfaction.

The remainder of this document is structured as follows:

- In **Section II**, we outline the importance of separating the T&D System from Generation and provide an overview of PREPA’s recent operational performance;
- In **Section III**, we provide the legal framework that supports the PREPA transformation; and
- In **Section IV**, we provide details on the competitive solicitation process to select a third-party T&D System operator.
- Finally, in **Section V**, we present a high-level picture of the potential financial benefits from a third-party T&D System operator.

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<sup>2</sup> Due to the tax-exempt status of PREPA’s debt, PREPA must hold the title to the T&D System assets to benefit from access to lower financing costs.

<sup>3</sup> Quanta Consortium includes ATCO Ltd., IEM and Quanta Services, Inc.



The Advantages of a Third-Party Operator of the Puerto Rico T&D System



## Reasons for the T&D Separation

### a. Current Situation

For decades, Puerto Rico has suffered the burden of unreliable and costly electric power, a result of an aging infrastructure with insufficient investment, poor operating performance, high and volatile fuel prices and devastating hurricanes. PREPA has underperformed relative to industry standards in several relevant categories including customer satisfaction, safety and reliability, as demonstrated in Figure 1, below. Devastation in 2017 caused by Hurricanes Irma and Maria resulted in significant damage to an already aged T&D System. In addition, PREPA was viewed as suffering from poor management and insufficient capital investment. During the period following the hurricanes, millions of residents were left without power and were cut off from many essential public services. Disaster recovery was further stressed by the fact that Puerto Rico has faced a fiscal imbalance since 2006, leading to a debt-to-GDP ratio of about 70% -- \$72 billion in aggregate debt. Nearly \$9 billion of this debt is due to PREPA alone.<sup>4</sup>

Beyond the impact of the devastation caused by Hurricanes Irma and Maria, PREPA ratepayers have dealt with suboptimal service characterized by long customer service wait times, lengthy service outages, and frequent interruptions.

Below we present some common measures of management performance, such as customer satisfaction, safety and reliability in addition to financial management. PREPA currently collects data on *customer satisfaction* through call center metrics, *safety* through Incident Rates, Lost Time Cases and Number of Deaths, *reliability* through the Customer Average Interruption Duration Index ("CAIDI") and *financial management* through cents/kWh delivered (see Figure 7). Figure 1 provides a snapshot of how PREPA has performed in each of these areas from 2013 – 2017, relative to industry benchmarks. More detail in each area is provided in the remainder of this subsection.

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<sup>4</sup> Written Statement of Omar Marrero to the House Natural Resources Committee Hearing dated April 9, 2019



The Advantages of a Third-Party Operator of the Puerto Rico T&D System



**Figure 1. Summary of PREPA Operating Statistics 2013-2017**

	2013	2014	2015	2016	2017	Average	Utility Benchmark	Performance above Benchmark
Customer Satisfaction - Avg Speed to Answer (minutes)	n/a	8.0	6.0	10.0	20.0	11.0	1.0	1000%
Reliability - CAIDI	147.0	150.0	163.0	179.0	179.0	163.6	111.0	47%
Safety - Incidence Rate (# of reported safety incidents)	18.0	16.0	13.0	13.0	14.0	14.8	1.2	1176%

**Notes:**

(1) Source for PREPA operating statistics: Sargent & Lundy Report (see FN5)

(2) Avg. Speed to Answer is an approximation from the Sargent & Lundy Report

(3) Utility benchmarks vary by metric: Avg. Speed to Answer target is from national call center averages, CAIDI is the median IEEE Power & Energy Society Large Utility Reliability Benchmark from 2015-2017, Incidence Rate is from Bureau of Labor Statistics for Power Transmission, Control, and Distribution industry group for companies with between 500-999 employees..

The T&D Solicitation Process (described in Section IV) has incorporated an incentive mechanism that tracks various management performance metrics and awards financial compensation based on predefined target metrics, informed by the Sargent & Lundy Performance Metrics Report (the “Sargent & Lundy Report”) and refined by FTI Consulting’s judgement based on industry experience.<sup>5</sup> Some of the targets in the current draft of the T&D Contract are used below as an indication of the gap between PREPA’s current performance and that of industry standards.

### Customer Satisfaction

Measuring PREPA’s historical success is challenging because PREPA has not traditionally tracked all typical customer service metrics. For example, the industry standard for tracking customer satisfaction is through either J.D. Power or American Customer Satisfaction Index (“ACSI”); PREPA has not historically measured customer satisfaction through an independent party. The third-party operator will be required to calculate customer satisfaction through an independent party to enable measurement of improvements in customer service provision. For the basis of measuring the historical customer satisfaction benchmark, we considered representative statistics that have been collected by PREPA. Figure 3 illustrates PREPA’s 2018 average call center performance relative to the target metrics.

<sup>5</sup> Puerto Rico Electric Power Authority—Transmission & Distribution Performance Metrics, Sargent & Lundy, August 14, 2019



The Advantages of a Third-Party Operator of the Puerto Rico T&D System



**Figure 2. Call Center Metrics**

Metric	PREPA 2018 Average	Path to Industry Benchmark		
		Year 1	Year 3	Year 5
% of Calls Abandoned	52%	Less than 30%	Less than 20%	Less than 15%
Average Speed to Answer (Minutes)	15:12	Less than 10 min.	Less than 5 min.	Less than 3 min.

*Notes: (1) Average Speed to Answer includes the time in the queue until reaching an agent after the caller has gone through integrated voice response.*

*(2) Target metrics will be reassessed in Year 5 with the ultimate desire to reach the utility average in Average Speed to Answer of one minute.*

As evidenced above, PREPA has significant strides left to make in the area of call center customer satisfaction that a qualified third-party operator is well-positioned to improve upon.

### Safety

Public and employee safety is a critical component to a successful electric utility operation. Eliminating hazards requires proper training and strict adherence to the rules and regulations set forth by the Occupational Safety and Health Administration ("OSHA"). OSHA requires the reporting of several metrics to evaluate and track the safety of an organization, including, Incident Rate<sup>6</sup> which measures the number of safety-related incidents that are reported to OSHA scaled to workforce size, Lost Time Cases<sup>7</sup> which measures the number of lost work days as a result of safety incidents reported to the OSHA and scaled to workforce size, and Number of Deaths measures job-related fatalities reported to the OSHA. Figures 4 through 6 illustrate how PREPA has performed since 2003 relative to the Year 1 and Year 5 targets included in the T&D Contract.

<sup>6</sup> Measured as ( # of OSHA Recordable Cases / # of Employee Labor Hours Worked ) \* 200,000

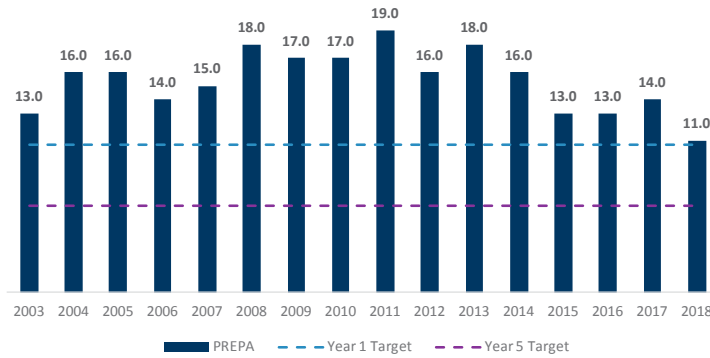
<sup>7</sup> Measured as ( # of Lost Time Cases / # of Employee Labor Hours Worked ) \* 200,000



The Advantages of a Third-Party Operator of the Puerto Rico T&D System



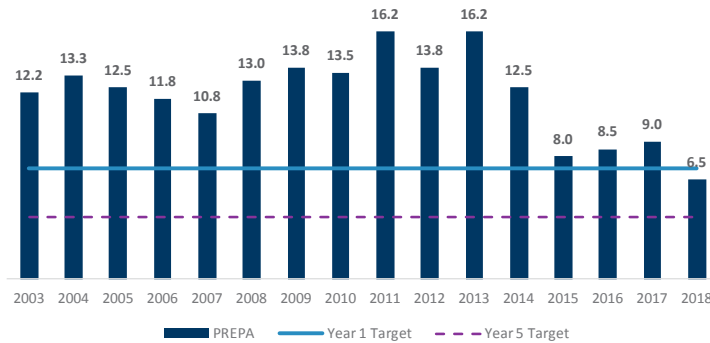
**Figure 3. PREPA Incident Rate since 2003**



Notes: (1) Year 1 Target and Year 5 Target are derived from the T&D Connect Annex IX: Performance Metrics

While PREPA's Incident Rate has improved over the last five years, it is still higher than the target metrics as currently envisioned in the T&D Contract.

**Figure 4. PREPA Lost Time Cases since 2003**



Notes: (1) Year 1 Target and Year 5 Target are derived from the T&D Connect Annex IX: Performance Metrics

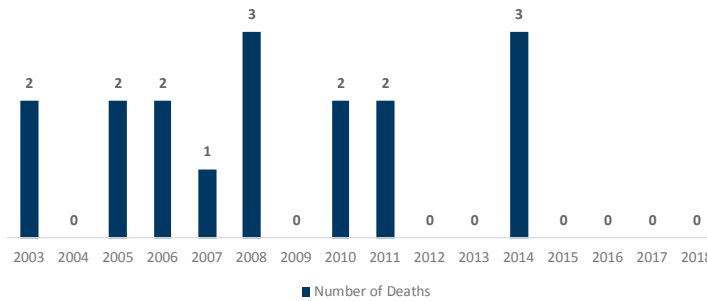
PREPA's Lost Time Cases record has improved over the last five years but is still higher than the target metrics as currently envisioned in the T&D Contract.



The Advantages of a Third-Party Operator of the Puerto Rico T&D System



Figure 5. PREPA Number of Deaths since 2003 (fatalities)



PREPA has had a high number of fatalities historically with 17 occurring since 2003. While it has shown improvement with no fatalities occurring in the past four years, the industry standard is a zero-tolerance with respect to fatalities.

Fostering an unsafe work environment has significant reputational and financial impacts. It creates a culture in which current employees may feel uneasy and apprehensive about performing their responsibilities and hinders the ability to attract new hires who have safer occupational alternatives. Negative financial impacts also result from ongoing litigation relating to wrongful injury or death.

### Reliability

Providing reliable, consistent, resilient power is critical to the safe operations of an electric utility. There are several metrics that utilities use to gauge reliability including System Average Interruption Duration (“SAIDI”), System Average Interruption Frequency Index (“SAIFI”) and Customer Average Interruption Duration Index (“CAIDI”).<sup>8</sup> For purposes of illustration, this section focuses on CAIDI, which combines in its calculation both SAIDI and SAIFI. In general terms, CAIDI is the average restoration time a customer may experience.

Poor reliability directly leads to more line callouts, more overtime for crews fixing otherwise avoidable outages and higher maintenance expenses, in addition to low rates of customer satisfaction. It also leads to a number of negative financial impacts including revenues that would

<sup>8</sup> Measured as  $(\sum (\text{Interruption Length} * \text{Interrupted Customers})) / \sum \text{Customers that Experience an Interruption}$



The Advantages of a Third-Party Operator of the Puerto Rico T&D System



otherwise have accrued but for the inability to provide power to ratepayers and a lack of confidence among ratepayers leading to an increase in bad debt expenses and further lagging on the payment of existing electricity bills. Figure 7 shows PREPA's CAIDI (excluding major storm events) since 2012 relative to the target metrics as currently envisioned in the T&D Contract.

**Figure 6. PREPA's CAIDI since 2012 (minutes)**



Notes: (1) Year 1 Target and Year 5 Target are derived from the T&D Connect Annex IX: Performance Metrics.  
 (2) The Sargent & Lundy Report notes concerns with PREPA's calculation of CAIDI, implying that PREPA's historic performance may be worse than reported.  
 (3) CAIDI follow industry standards (IEEE formula) and therefore exclude momentary outages (outages less than five minutes) and major events such as hurricanes and transmission line events.

CAIDI for PREPA has historically been higher than target metrics. Notably, with the exception of 2018, CAIDI has experienced a general upward trend over the past seven years, though we note some concerns with PREPA's approach to CAIDI calculation identified in the S&L Report.

### Financial Performance

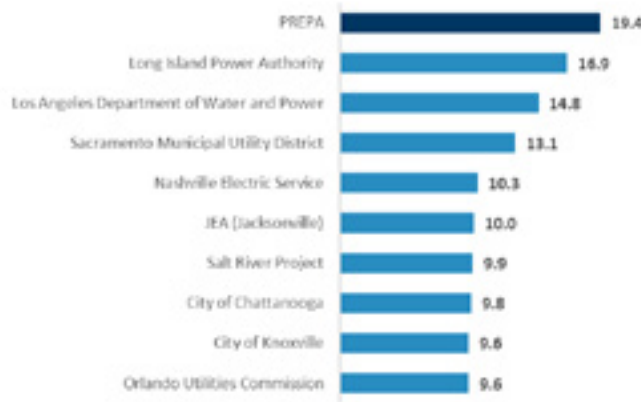
In addition to poor management performance, Puerto Rico ratepayers are paying some of the highest electricity rates in the U.S., driven by high fuel oil prices incurred by island-locked generation, sub-optimal management and lack of oversight. Figure 7 illustrates PREPA's rates in 2016, relative to comparable public utilities.



The Advantages of a Third-Party Operator of the Puerto Rico T&D System



**Figure 7. 2016 Average Cost of Service (cents per kWh)**



Notes: (1) Comparable public utility data from SNL (2016).

Puerto Rico has a long road ahead to transforming the electric grid into a reliable and storm resilient system capable of delivering power to Puerto Rico ratepayers at more affordable prices. The benefits realized by outsourcing the operations and maintenance and management of the electric T&D System to a qualified third-party operator is a necessary step towards transforming the T&D System.

#### **b. Reasons for Separating T&D from Generation**

There are several operational, financial and business reasons to separate the T&D and Generation functions of PREPA. Firstly, separating the two functions allows the appropriate expertise to be applied to two very different segments of the utility supply chain, compared to the traditional vertically integrated utility that is responsible for all facets of utility service. The skills required to operate a generating station in a reliable and cost-effective manner are very different than those required to successfully operate the T&D System. Separation allows the flexibility to hire an industry expert operator for both functions as opposed to finding one operator who is unlikely to be an expert in both, while allowing for the development of privately-owned generation over time.

Secondly, administering a broad solicitation for operating the T&D System and the Generation will enable a competitive process to attract several competent operators and to ensure that the selected proponent is the most qualified respondent relative to its proposed fee structure. This will provide a greater opportunity for a lower cost, more reliable system in comparison to the incumbent (PREPA) continuing to operate the entire system.



The Advantages of a Third-Party Operator of the Puerto Rico T&D System



Finally, the separation of the T&D System from Generation will also aim to increase the level of accountability of the operations and management teams and would present an opportunity to add structured oversight. As two distinct entities, relationships between the Generation and T&D System operators will be formalized in operating contracts, creating assurances that existing Generation will not be unduly advantaged over newer or yet to be developed assets. Further, the Puerto Rico Energy Bureau ("PREB") will supervise the performance and compliance of the third-party operator to ensure that the operator is meeting its obligations as set out in the T&D Contract.<sup>9</sup>

**c. Long-term Benefits**

Hiring a third-party T&D System operator creates significant benefits to Puerto Rico ratepayers including advancing the modernization of the electric grid on the island, allowing for increased competition of fuels and technology among generation assets, stabilizing electric rates impacting Puerto Rican ratepayers, driving local and foreign investment in Puerto Rico and promoting economic development across the island.

As discussed in Section II(a), the T&D System is an aging electric grid that has long suffered from underinvestment relative to comparable systems while also dealing with significant weather events, such as Hurricanes Maria and Irma which have levied significant damage to the T&D System. Returning the T&D System to an operating level more in line with good industry practice will require significant investment and a substantial capital program including both FEMA and non-FEMA projects, the successful execution of which will require an operator with expertise in administering FEMA-funded projects and in T&D System operations, more broadly.

The PREPA retail rate mechanism allows for recovery of all operating expenses and the depreciation and financing costs of any invested capital deployed for the maintenance and/or improvement of the T&D System. As a result, if the operating and capital budgets are not managed appropriately in a cost-efficient manner the Puerto Rico ratepayers are directly impacted. Installing a qualified, reputable third-party operator with significant experience maintaining a complex T&D System and designing a contractual structure that equitably shares the risks and places specific budgetary controls is critical to improving electric service to Puerto Rico ratepayers.

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<sup>9</sup> See Section 10.1: Work Plan of Act 120.



The Advantages of a Third-Party Operator of the Puerto Rico T&D System



For the reasons outlined above, hiring a third-party T&D Operator is critical to satisfying the mandate laid out in Act 29 and ensuring Puerto Rico realizes its goal of transforming the electric grid and preparing it for a more sustainable, resilient, stable electric T&D System.

## II. Legal Framework

Act 120, coupled with the Puerto Rico Public-Private Partnership Authority Act, Act 29-2009 (“Act 29”), sets forth the legal framework for creating a comprehensive, fair and transparent process to incentivize private investment in Puerto Rico through a series of private-public partnerships. Specifically, Act 120 allows for the following:

- Establishment of the Authority and empowers it to facilitate PPPs for any PREPA function as defined in Act 29;
- Stipulates that PREPA can sell or transfer operation for its generation assets provided that no one entity owns more than 50% of the generation; and
- Enables PREPA to transfer or delegate any of its operations, functions or services through a PPP.

The establishment of the Authority is a critical step in organizing and facilitating the transformation of the electric grid in an efficient and transparent manner and to ensure execution of the vision is completed in the best interests of the Puerto Rico ratepayers. Among other responsibilities, Act 120 gives the Authority the power to: implement and execute “PREPA Transactions”, determine which PREPA functions, services or facilities would be best suited for PPPs and determine which generation assets to either sell to a Private Partner or transfer to a third-party operator.

Act 29 and Act 120 clearly establish the mandate for transformation of the system, the creation of the Authority and empowers it to define which PREPA Transactions are in the public’s best interest and the defined PPP process through which those PREPA Transactions are effectuated. With this mandate, the Authority initiated the T&D RFQ process on October 31, 2018, described in further detail below.

## III. T&D Solicitation Process

### a. Basis for the Process

On October 31, 2018, the Authority issued the T&D RFQ in accordance with the Act 120 mandate, seeking respondents with demonstrated experience operating a large electric utility, financial strength and access to capital, strong technical expertise and a track record of high-quality T&D



The Advantages of a Third-Party Operator of the Puerto Rico T&D System



System safe operations. Initially, the T&D transaction structure contemplated in the RFQ was a long-term operating contract to manage and operate the T&D System with the possibility that the selected operator would be allowed to make capital investments as a mechanism for them to take an economic interest in the transformation of PREPA beyond just the agreed upon management fee and compensation structure. The broad solicitation resulted in four Qualified Respondents being chosen; Duke, Exelon, PSEG and the Quanta Consortium.

Following the issuance of the RFQ, on February 1, 2019, the Authority issued an RFP inviting Bidders to submit proposals for the operation and management of the T&D System, including the administration of federal disaster recovery funding. Specifically, the RFP sought a qualified Private Partner to manage, operate, maintain, rehabilitate, repair, refurbish, replace, improve, expand and finance the T&D System pursuant to the contemplated PPP contract. After significant discussions with the Bidders, the transaction and compensation structure was modified from a concessionaire structure, focused on capital investment by the Selected Proponent, in favor of a more traditional operator-manager structure, with a compensation structure including fixed and incentive components comparable to the Long Island Power Authority ("LIPA") and PSEG T&D management contract ("LIPA/PSEG Contract"). The primary driver of the change to the structure of the transaction related to tax issues arising from the desire to maintain the tax-exempt status of PREPA's debt as a source of funding.

**b. Justification**

The RFQ process was a broad solicitation extending to many qualified operators in a competitive process that served to ensure an adequate number of qualified respondents. The process will culminate in the selection of a qualified capable operator with the requisite experience to improve and maintain the T&D System to a level of operation consistent with good industry standards and with the tools to take an active role in preparing and mitigating the impact of future hurricanes or weather events on the system. The contractual structure in place has been designed to ensure the operator:

- Is managing the system consistent with prudent utility standards;
- Has its performance benchmarked to an appropriate set of operational, financial budgetary controls, customer satisfaction and safety metrics;





The Advantages of a Third-Party Operator of the Puerto Rico T&D System



- Receives an appropriate level of oversight from the Administrator and the Puerto Rico Energy Board (“PREB”); and,
- Is compensated fairly for the level of risk assumed.

Identifying an operator capable of operating the system consistent with prudent utility standards is critically important given PREPA’s historically poor operating performance.



## The Advantages of a Third-Party Operator of the Puerto Rico T&amp;D System



#### IV. Summary of Financial and Economic Benefits

The financial performance metrics in Section II.a show that PREPA is currently providing service at a higher cost per kWh than other public municipal utilities. A qualified third-party operator, selected through the T&D Solicitation Process, will necessarily improve safety, reliability and customer satisfaction performance, all of which will have a direct impact on improving the efficiency and cost of running the T&D System. Both increasing the amount of power delivered to the market (per fixed resource inputs) and/or reducing the operating costs that are passed-through will have a positive impact on the financial performance of the T&D System and will ultimately provide benefit to customers. Figure 8 below examines two sensitivities relative to the FY2019 approved budget of revenues, costs and kWh produced. The cost reduction scenario evaluates the impact of a 10% reduction in base revenue operating costs (non-variable costs such as labor costs and maintenance expense) due to new work methods and improved management practices implemented by the T&D Operator. The higher efficiency scenario evaluates the impact of a reduction in the amount of fuel and purchased power required due to improved operations leading to reducing line losses. The analysis holds fixed all other costs including subsidies and fuel purchase prices.

**Figure 8. FY2019 Required Revenue Sensitivity<sup>10,11</sup>**

		FY2019 Budget		
			Cost Reduction Scenario	Higher Efficiency Scenario
Base Revenue	\$M	1,166	1,166	1,166
<b>Cost Reduction of 10%</b>	<b>\$M</b>	-	<b>(117)</b>	-
Fuel & Purchased Power	\$M	1,766	1,766	1,766
Forecast Electricity Consumption	GWh	15,964	15,964	15,964
Reduced Consumption from 10% Efficiency	GWh	-	-	(1,596)
Adjusted Forecast Electricity Consumption	GWh	15,964	15,964	14,368
<b>Savings from Efficiency</b>	<b>\$M</b>	-	-	<b>(177)</b>
Other Revenue Components	\$M	400	400	400
Adjusted Required Revenue		3,332	3,215	3,155
% savings			-3.5%	-5.3%

Source: 2019 Fiscal Plan for Puerto Rico Electric Power Authority, FTI Analysis

<sup>10</sup> The base revenue component covers non-variable fixed costs such as labor costs, maintenance expenses, bad debt expenses and restructuring-related charges.

<sup>11</sup> The other rate components include recovery of CILT and other subsidies and RSA settlement charges.



The Advantages of a Third-Party Operator of the Puerto Rico T&D System



A hypothetical 10% improvement in base revenue-related operating costs would lead to savings of \$117 million in required revenue. Similarly, a hypothetical 10% improvement in efficiency would lead to savings of \$177 million in required revenue. This analysis shows some of the benefits from improvements in operations that could result from separating the T&D System from Generation and transitioning operations to a capable, qualified third-party operator, a critical component to the energy transformation envisioned by Act 120. A qualified operator will be able to improve the reliability, safety and performance of the T&D System in a cost-effective manner. These savings will have a positive impact on the financial performance of the T&D System and ultimately provide benefits to consumers. In addition, savings external to the utility will result from reduced outage time, resulting in a net benefit to the Puerto Rico economy.





The Advantages of a Third-Party Operator of the Puerto Rico T&D System



## Appendix A: List of Acronyms

Authority	The Puerto Rico Public Private Partnership Authority
BLS	Bureau of Labor Statistics
Btu	British thermal unit
CCGT	Combined Cycle Gas Turbine
DART	Days Away from Work, Restricted or Transferred
EAF	Equivalent Availability Factor
GenCo	Successor to PREPA that acquires or obtains ownership of the Legacy Generation Assets
Generation Operator	GenCo Third-Party Operator
GridCo	Successor to PREPA that acquires or obtains ownership of the T&D System
GT	Gas Turbine
IPP	Independent Power Producer
IRP	Puerto Rico Integrated Resource Plan 2018-2019
kWh	Kilowatt hour
Legacy Generation	Existing PREPA generating assets
MW	Megawatt
NG	Natural Gas
O&M	Operations and Maintenance
PPP	Public-Private Partnership
PPOA	Power Purchase and Operating Agreements
PREB	Puerto Rico Energy Bureau
PREPA	Puerto Rico Electric Power Authority
P3A	The Puerto Rico Public Private Partnership Authority
RFI	Request for Information
RFP	Request for Proposal
RFQ	Request for Qualifications
T&D Operator	Third-Party Operator of the T&D System
T&D System	Transmission and Distribution System





The Advantages of a Third-Party Operator of the Puerto Rico T&D System







The Advantages of a Third-Party Operator of the Puerto Rico T&D System



## Appendix B: Materials Referenced

1. Puerto Rico Transmission and Distribution System – Operations and Maintenance Agreement.
2. Puerto Rico Electric Power Authority – Transmission & Distribution Performance Metrics, Sargent & Lundy, August 14, 2019.
3. 2019 Fiscal Plan for the Puerto Rico Electric Power Authority, as certified by the Financial Oversight and Management Board for Puerto Rico on June 27, 2019.





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## **Exhibit C: Request for Qualifications**





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Puerto Rico Public-Private Partnerships Authority



# REQUEST FOR QUALIFICATIONS

## Puerto Rico Electric Power Transmission and Distribution System

RFQ 2018-2

Issued by the Puerto Rico Public-Private Partnerships Authority

**Date Issued: October 31, 2018**

**Responses Due Date: December 5, 2018 at 5:00 PM AST**





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*This Request for Qualifications (as defined below) is prepared for informational purposes only and does not purport to be all-inclusive or to contain all the information that a Respondent (as defined below) may desire in investigating the potential transaction. No express or implied warranty is given by the Puerto Rico Public-Private Partnerships Authority or any other agency or instrumentality of the Government of Puerto Rico as to the accuracy or completeness of the information contained herein or otherwise made available in connection with the Project (as defined below).*







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# 1. Overview of RFQ and PPP Process

## 1.1 Introduction

The Puerto Rico Public-Private Partnerships Authority (the “**Authority**”), in collaboration with the Puerto Rico Electric Power Authority (“**PREPA**”), hereby requests Statements of Qualifications (“**SOQs**”) from companies and consortia interested in managing and operating Puerto Rico’s electric power transmission and distribution (“**T&D**”) system, including the administration of federal disaster recovery funding, pursuant to a long-term contract (the “**Project**”).

The Authority and PREPA wish to enter into a public-private partnership (“**PPP**”) with a private sector company or consortium (“**Private Partner**”) in order to achieve the following objectives for the T&D system:

- deliver low-cost electricity to ratepayers of Puerto Rico;
- increase T&D system resiliency, achieving performance in line with mainland U.S. utility median performance, measured via industry-standard “SAIFI” (average number of outages per customer per year) and “SAIDI” (average length of outage per customer per year) metrics;
- increase T&D system reliability;
- deploy new technologies; and
- exercise industry best-practices and operational excellence.

Any natural or legal person, joint venture, partnership or other entity, or consortium thereof, that submits an SOQ in response to this Request for Qualifications (“**RFQ**”) (each, a “**Respondent**”) is encouraged to review the following documents, which are available for download on the Authority’s website at <http://www.p3.pr.gov>, for further background on the Project and the legal framework within which it will be executed:

- PREPA Organic Act, Act No. 83-1941, as amended;
- Public-Private Partnership Authority Act, Act No. 29-2009, as amended (the “**PPP Act**”);
- Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Participatory Public-Private Partnerships Contracts under Act No. 29-2009, as amended (the “**PPP Regulation**”);
- Puerto Rico Energy Transformation and RELIEF Act, Act No. 57-2014, as amended;
- PREPA Revitalization Act, Act No. 4-2016, as amended; and
- Puerto Rico Electric System Transformation Act, Act No. 120-2018, as amended (“**Act 120**”).

In addition, the PREPA Fiscal Plan, certified on August 1, 2018 by the Financial Oversight and Management Board for Puerto Rico (“**FOMB**”), is available at <http://www.oversightboard.pr.gov/documents>. The Financial Information and Operating Data Report for Puerto Rico, dated December 18, 2016, and the New Fiscal Plan for Puerto Rico, certified on October 23, 2018 by the FOMB (the “**Government Fiscal Plan**”), are available at <http://www.aafaf.pr.gov>.





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## 1.2 Background of Puerto Rico's PPP Program

The PPP Act provides that the public policy of the Government of Puerto Rico (the "**Government**") is to favor and promote the establishment of PPPs for the development of certain Priority Projects (as defined in the PPP Act) to, among other things:

- further the development and maintenance of infrastructure facilities;
- share with the private sector the risks involved in the development, operation and/or maintenance of such projects;
- improve the services rendered and the functions of the Government; and
- encourage job creation and promote Puerto Rico's socioeconomic development and competitiveness.

The PPP Act provides that the public policy with respect to PPPs must be to maintain such controls as are necessary to protect the public interest yet balance this need for controls with the profit-making purpose of any private operation. The contractual relationship must thus be mutually beneficial, while ensuring the efficient, effective and affordable provision of public goods and services to all citizens.

The Authority was created pursuant to the PPP Act as a public corporation of the Government affiliated with the Puerto Rico Fiscal Agency and Financial Advisory Authority (known by the Spanish acronym "**AAFAF**"). The Authority is designated as the sole government entity authorized and responsible for implementing the Government's public policy on PPPs and for determining the functions, services or facilities for which PPPs are to be established.

The PPP Act and the Authority's procurement process is well organized, transparent and clear. Evidence of the robustness of the framework can be seen in the successful, long-term concession of toll roads PR-22 and PR-5 (2011) and the long-term lease agreement for the Luis Muñoz Marín International Airport (2013).

For each proposed PPP project, the Authority must establish a committee (the "**PPP Committee**"), as provided in the PPP Act, responsible for, among other things: (1) the qualification, evaluation and selection processes of the proposed PPP; (2) establishing the terms and conditions of the long-term agreement awarded to the Private Partner as a result of the process described in this RFQ (the "**RFQ Process**") and the competitive procurement process that follows the RFQ Process (the "**RFP Process**") and executed by the Private Partner and PREPA to establish a PPP (the "**PPP Contract**"); and (3) reporting on the procedures followed, among others.

**Respondents should note that the PPP Committee has been vested with the authority to negotiate the terms of the PPP Contract. PREPA has been vested with the authority to execute the PPP Contract negotiated by the PPP Committee with a Private Partner, subject to the approval of (i) the Puerto Rico Energy Bureau created by Act 57-2014, as amended, to regulate, monitor and enforce the energy public policy of the Government (the "Energy Bureau"), (ii) the board of directors of each of the Authority and PREPA, (iii) the Governor of Puerto Rico or his delegate and (iv) the FOMB.**

## 1.3 Background on Transformation of the Electric System

On January 22, 2018, Governor Ricardo A. Rosselló announced the Government's intent to transform and modernize the electric system through private ownership, management or operation of PREPA's assets. PREPA had suffered years of underinvestment and substandard management, resulting in significant operational and financial challenges that were exacerbated by Hurricane Irma and Hurricane Maria in September 2017.

On June 20, 2018, Governor Rosselló signed Act 120 into law, with the stated goal of transforming Puerto Rico's energy system into a modern, sustainable, reliable, efficient, cost-effective and resilient system. Act 120 provides the legal framework through which the Authority will determine the PREPA services and facilities that will be subject to PPPs and the PREPA generation assets that may be sold, transferred or assigned to PPPs.





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This RFQ is a part of the Government's mission to transform Puerto Rico's electric system. The Authority, together with PREPA and other stakeholders, is developing a process for the transformation of PREPA's generation assets that is expected to be announced in the coming months.

#### 1.4 Function of this RFQ

The Authority is issuing this RFQ pursuant to Section 5 of Act 120 and Section 3 of the PPP Act. This RFQ may be amended at any time through the publication of addenda which will be posted on the Authority's website: <http://www.p3.pr.gov>. Interested parties will be responsible for periodically checking the Authority's website for announcements and publication of relevant information concerning this process, including any addenda.

Prospective Respondents should carefully review Act 120, the PPP Act and the PPP Regulation (each of which is available for download on the Authority's website: <http://www.p3.pr.gov>) and should ensure that, in addition to the terms and conditions of this RFQ, they comply with all applicable provisions set out therein.

The intent of this RFQ is to provide each interested prospective Respondent with sufficient information to enable it to prepare and submit an SOQ for consideration and evaluation by the Authority. This RFQ contains instructions to Respondents and a Form of Respondent Certification, which must be completed in its entirety and submitted to the Authority for the Respondent to be considered for qualification. The completed Form of Respondent Certification, together with all required attachments, will constitute the Respondent's SOQ. The Form of Respondent Certification is attached in **Appendix A**.

This RFQ is being issued to identify those Respondents that meet the minimum requirements necessary to carry out the Project in compliance with Act 120 and the PPP Act, in particular those Respondents that demonstrate:

- experience operating a large electric utility;
- financial strength and capital resources, with significant access to the capital markets; and
- strong technical expertise, with a track record of high-quality operations.

The objective of this RFQ is to enable the PPP Committee to identify Respondents that, based on their SOQ pursuant to this RFQ, are deemed qualified by the PPP Committee to participate in the RFP Process ("**Qualified Respondents**").

In evaluating Respondents, the PPP Committee may disqualify a Respondent for any of the reasons stated in Sections 8.1 (Disqualifying Events) and 8.2 (Other Grounds for Disqualification) of the PPP Regulation, or if the Respondent:

- is ineligible to submit a proposal on one or more grounds specified in Act 120, the PPP Act or the PPP Regulation;
- fails to satisfy the standards established by the PPP Committee with respect to the Respondent's required financial condition, or technical or professional ability and experience (as set forth in Section 4 of this RFQ); or
- fails to comply with the requirements of Sections 9(a) (Applicable Requirements and Conditions for those who wish to be considered as Proponents) and/or 9(d) (Consortia) of the PPP Act, as applicable.

**Pursuant to Section 5.4 (Qualification of Proponents (RFQ)) of the PPP Regulation, the PPP Committee reserves the right to limit in its absolute discretion the number of Respondents it considers to be qualified in order to arrive at a shortlist of Qualified Respondents that allows for an orderly procurement.**

The Authority reserves the right to terminate the procurement process in whole or in part at any time, for any reason or for no reason, prior to the execution by PREPA of a PPP Contract, without incurring any cost, obligations or liabilities whatsoever. Respondents will not be entitled to an indemnity (including but not limited to





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reimbursement for costs and expenses) from the Authority or PREPA if the Authority decides, in its sole and absolute discretion, to terminate the procurement process related to the Project.

## 1.5 Definitions

For the purposes of this RFQ, the following defined terms will have the meanings used in the sections indicated below.

Term	Section	Term	Section
AAFAF	1.2	President	2.1.3
Act 120	1.1	Private Partner	1.1
Authority	1.1	Project	1.1
Claim	4.11	PROMESA	2.1.2
Conflict of Interest	4.7	Proposed Electric Sector Regulatory Framework	2.2.3
Control	1.7	Qualified Respondents	1.4
Covered Party	3	Related	1.7
Energy Bureau	1.2	Respondent	1.1
Ethics Guidelines	1.8	Respondent Representative	4.2
Evaluation Criteria	3	Restricted Parties	1.8
FEMA	2.1.3	RFC	1.6
FOMB	1.1	RFC Deadline	1.9
Government	1.2	RFP	1.6
Government Fiscal Plan	1.1	RFP Process	1.2
Key Individuals	3	RFQ	1.1
PPP	1.1	RFQ Process	1.2
PPP Act	1.1	SOQs	1.1
PPP Committee	1.2	Submission Deadline	1.6
PPP Contract	1.2	T&D	1.1
PPP Regulation	1.1	Title III Court	2.1.2
PREPA	1.1	Team Member	1.7

## 1.6 Process and Schedule

***Persons receiving this RFQ that intend to submit an SOQ should so indicate by providing their contact information to the PPP Committee via e-mail at [P3TDProject@p3.pr.gov](mailto:P3TDProject@p3.pr.gov).***

The procurement process for the Project is expected to take place in the following stages:

### Stage 1 — RFQ Process (Qualification Stage)

The RFQ Process is intended to identify the Qualified Respondents that are eligible to receive the Request for Proposals ("RFP") issued by the Authority and to obtain proposals for the Project.

During this stage Respondents submit their SOQ pursuant to this RFQ.

The RFQ Process is standalone and independent and will be completed once the Qualified Respondents are identified by the Authority and all Respondents have received final notification from the Authority as to the results of the RFQ Process.





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## Stage 2 — RFP Process (Binding Bid Stage)

The RFP Process is the competitive procurement process that follows the RFQ Process. The RFP Process is intended for Qualified Respondents only and is expected to result in the selection of a Private Partner.

Qualified Respondents that elect to participate in the RFP Process and sign a confidentiality and process agreement (a form of which will be provided to each Qualified Respondent) will have the opportunity to conduct a thorough due diligence of PREPA, including:

- receipt of the RFP for the Project;
- a confidential information memorandum and financial model;
- access to an electronic data room that contains detailed information about the Project;
- site visits;
- management presentations and meetings with PREPA subject matter experts;
- diligence Q&A process with PREPA subject matter experts; and
- receipt of a draft form of PPP Contract, which will include a detailed description of the Project and address all of the rights and obligations of the parties under the PPP Contract.

A more detailed description of the RFP Process, together with a more detailed timetable, will be provided in the RFP.

## Stage 3 — Implementation of the PPP Contract

Once the Private Partner and PREPA have executed the PPP Contract, the Project will proceed in accordance with the terms and conditions of the PPP Contract.

Below is a summary schedule of the major activities associated with the procurement process for the Project. The dates and activities are subject to change and may be revised through the issuance of addenda to this RFQ.

<b>October 31, 2018</b>	- Date of issuance and first publication of public notice of RFQ by the Authority.
<b>November 14, 2018</b>	- Deadline for submission of Requests for Clarification with respect to this RFQ by prospective Respondents (" <b>RFC</b> ").
<b>November 20, 2018</b>	- Deadline for the Authority to release responses to RFCs.
<b>December 5, 2018</b>	- Deadline for submission of SOQs (no later than 5:00 pm AST).
<b>January 16, 2019</b>	- Estimated date for notification of Qualified Respondents.

***All SOQs must be submitted by no later than December 5, 2018 at 5:00 pm AST (the "Submission Deadline") in the manner set forth in Section 4 of this RFQ.***

As described in more detail in Section 4 of this RFQ, the Authority will only accept SOQs delivered by hand. The Authority will not accept SOQs sent by facsimile, electronic mail, telex or other electronic means. The determination of whether an SOQ is submitted before the Submission Deadline will be based on the date and time stamp that each Respondent must ensure it receives from the Authority. It is the sole responsibility of each Respondent to ensure that its SOQ is delivered no later than the Submission Deadline.





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***By submitting an SOQ, the Respondent specifically authorizes the Authority, PREPA, the PPP Committee and their respective officers, employees, advisors, counsel, accountants and other consultants and representatives to make any inquiry or investigation to verify the statements, documents and information submitted in connection with such SOQ, and to seek clarification from the Respondent's directors, officers, employees, advisors, counsel, accountants and other consultants and representatives related thereto.***

## 1.7 Consortia

To the extent that any Respondent has formed or proposes to form a consortium to participate in the RFP for this Project, such Respondent should include in its SOQ the identity, role and capabilities of each consortium member and each individual person, partnership, company or legal entity that is formally or informally reviewing the Project and intends to participate as a potential equity investor in the Private Partner that will execute the PPP Contract for this Project ("**Team Member**"). Team Members will include, without limitation, the ultimate owner or holding company of any such investor or, in the case of a managed fund or pension plan, the manager of the fund or pension plan. Each Team Member and its role must be identified in a Respondent's SOQ and cannot be changed without the prior written consent of the PPP Committee.

Except as specifically provided to the contrary in this RFQ, no Team Member may join or participate, directly or indirectly, as a Team Member with more than one Respondent for this Project. Each person or legal entity that participates as a Team Member is responsible for ensuring that no other person or legal entity that is Related (as defined below) to it joins or participates, directly or indirectly, as a Team Member in any other Respondent. Unless otherwise provided herein, any violation of this provision by a Respondent will disqualify such Respondent and each of its Team Members.

A person or company is "**Related**" to another person or legal entity if:

- one may exercise Control (as defined below) over the other; or
- each is under the direct or indirect Control (as defined below) of the same ultimate person or legal entity.

For purposes of this RFQ, a person or legal entity exercises "**Control**" of another if (a) it is the owner of any legal, beneficial or equitable interest in 50% or more of the voting securities in a corporation, partnership, joint venture, other person or entity or (b) if it has the capacity to (i) control the composition of the majority of the board of directors of any such person or entity, (ii) control the decisions made by or on behalf of any such person or entity or (iii) otherwise direct or cause the direction of the management, actions or policies of any such person or entity (whether formally or informally); and the terms "**Controlling**" and "**Controlled**" have corresponding meanings.

Each of the Team Members will ensure compliance with all licensing and other requirements under applicable laws with respect to the services to be provided by such Team Member.

Subject to the requirements and entitlements of the Authority set forth below, submission of an SOQ will not limit a Respondent's ability to add to, substitute or subtract from its Team Members during the procurement process.

The Authority intends to issue the RFP only to Qualified Respondents. If for any reason, after the Submission Deadline and prior to the issuance of the RFP, a Respondent wishes or requires to: (i) change any Team Members listed in the Respondent's SOQ (either by adding new members, removing listed members or substituting new members for listed members), (ii) materially change the ownership or Control of a Respondent or a Team Member or (iii) change the legal relationship between the Respondent and/or its Team Members, such as the creation of a new joint venture, partnership or legal entity that will take the place of the Respondent, then, in each case, the Respondent must submit a written application (with such information as the PPP Committee may require) to the PPP Committee seeking its consent to the proposed change, which consent may be withheld, delayed or conditioned in the sole and absolute discretion of the PPP Committee.





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Without limiting the foregoing, the PPP Committee may refuse to consent to a change to a Respondent or its Team Members and/or may disqualify the Respondent from further participation in the procurement process if, in its sole and absolute discretion, (a) the change would result in (i) a less desirable Respondent or less desirable Team Members than that originally proposed in the Respondent's SOQ or (ii) the Respondent or its Team Members being materially different from the Respondent that submitted the SOQ, (b) evaluating the application for a change would delay the qualification process or (c) the PPP Committee deems the change detrimental to the process, the Project, PREPA or the Authority.

## 1.8 Restricted Parties

The following entities will be deemed "**Restricted Parties**" and neither they nor their respective directors, officers, partners, employees and persons or legal entities Related to them are eligible to participate as Team Members or to otherwise assist any Respondent or Team Member, directly or indirectly, or participate in any way as a director, officer, employee, advisor, counsel, accountant or other consultant or otherwise in connection with any Respondent. Each Respondent will ensure that each Team Member does not use, consult, include or seek advice from any Restricted Party. The following Restricted Parties have been identified:

- Ankura Consulting Group, LLC
- Citigroup Global Markets Inc.
- CPM P.R. LLC
- Baker, Donelson, Bearman, Caldwell & Berkowitz, PC
- Cleary Gottlieb Steen & Hamilton LLP
- Filsinger Energy Partners
- Greenberg Traurig LLP
- ICF International, Inc.
- Rothschild Inc.
- Navigant Consulting, Inc.
- Nossaman LLP
- Norton Rose Fulbright US LLP
- McKinsey & Company, Inc.
- O'Melveny & Myers LLP
- O'Neill & Borges LLC
- Pietrantonio Menendez & Alvarez LLC
- Proskauer Rose LLP
- Rooney Rippie & Ratnaswamy LLP

At all times during the procurement process, Respondents must comply, and must ensure that all persons engaged to provide any type of assistance in connection with the Project are in compliance, with the Authority's Guidelines for the Evaluation of Conflicts of Interest and Unfair Advantages in the Procurement of Public-Private





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Partnership Contracts (the “**Ethics Guidelines**”), which are available for download on the Authority’s website:  
<http://www.p3.pr.gov>.

**Respondents should be aware that the list of Restricted Parties is not exhaustive and that a person that is not included as a Restricted Party may still be prohibited from participating in the Project pursuant to the provisions of the Ethics Guidelines.**

**Finally, except as to any Restricted Party, the fact that a person provides or has provided services to the Authority, PREPA or AAFAF in matters not related to the Project may not automatically prohibit such person from participating in the Project. To the extent any question exists as to whether such a person is a Restricted Party, the Respondent should consult with the Authority.**

## 1.9 Clarifications and Communications Protocol

Note that a Respondent may submit an RFC to the Authority for explanation or interpretation of any matter contained in this RFQ **no later than 5:00 p.m. AST on November 14, 2018 (the “RFC Deadline”)**. If the Authority provides any clarification as a result of an RFC, it will provide such clarification by means of a written explanation published on the Authority’s website **no later than November 20, 2018**.

Respondents should note the following regarding any RFC:

- any RFC from a Respondent must be made in writing to the email address of the PPP Committee at [P3TDProject@p3.pr.gov](mailto:P3TDProject@p3.pr.gov) no later than the RFC Deadline;
- the Authority will not respond to Respondents’ questions or RFCs that are not submitted in accordance with this Section 1.9; and
- any Respondent that has questions as to the meaning of any part of this RFQ or the Project, or who believes that the RFQ contains any error, inconsistency or omission, must submit its concern, in writing, to the PPP Committee in accordance with this Section 1.9.

The Authority may, in its sole and absolute discretion, provide all submitted questions or RFCs, along with the Authority’s answers thereto, without expressly identifying the originator. Any response provided by the Authority other than by way of an addendum issued in accordance with this RFQ will not be binding on the Authority or PREPA, nor will it change, modify, amend or waive the requirements of this RFQ in any way. Respondents may not rely on any response or information provided otherwise.

Respondents may also make inquiries regarding matters they consider to be commercially sensitive or confidential. Respondents must designate such inquiries as “commercially confidential”. If the Authority determines, in its sole and absolute discretion, that an inquiry designated as commercially confidential is of general application or would provide a significant clarification to this RFQ or any process or other matter outlined hereunder, the Authority may issue a clarification to all Respondents via addenda posted to the Authority’s website to address such matter. If the Authority agrees with the Respondent’s designation of an inquiry as commercially confidential, the Authority will provide a response only to the Respondent that submitted the commercially confidential inquiry.

Additional information regarding RFCs and other communications are set forth in Section 4 of this RFQ.

## 1.10 No Collusion or Lobbying

The Authority and PREPA are committed to a fair, open and transparent selection process.





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### **No Collusion**

Respondents and Team Members will not discuss or communicate, directly or indirectly, with any other Respondent(s) or any director, officer, employee, consultant, advisor, counsel, accountant, other consultant or representative or Team Member of any other Respondent regarding the preparation, content or representation of their SOQs. SOQs will be submitted without any connection (*i.e.*, arising through an equity interest (other than an equity interest that does not represent a Controlling interest in an entity, as determined by the Authority from time to time) in or of a Respondent or Team Member), knowledge, comparison of information or arrangement, with any other prospective Respondent or any director, officer, employee, advisor, counsel, accountant or other consultant or representative or Team Member of any other prospective Respondent.

By submitting an SOQ, a Respondent, on its own behalf and as authorized agent of each firm, corporation or individual Team Member of the Respondent, represents and confirms to the Authority, with the knowledge and intention that the Authority may rely on such representation and confirmation, that its SOQ has been prepared without collusion with other Respondents, fraud or unfair advantages. The Authority reserves the right to disqualify any Respondent that does not comply with this provision.

### **No Lobbying**

Respondents, their Team Members and their respective directors, officers, employees, advisors, counsel, accountants and other consultants and representatives will not, except as expressly contemplated by this RFQ or as expressly directed or permitted by the Authority, attempt to communicate directly or indirectly with any representative of the Authority, PREPA, the PPP Committee, AAFAF, the Energy Bureau, the Government, the FOMB or the federal government (other than via an RFC or other official communication following the communications protocol indicated in Section 1 of this RFQ) in relation to the Project or the RFQ Process, at any stage of this RFQ Process, including during the evaluation process. The Authority reserves the right to disqualify a Respondent that does not comply with this provision.

Respondents, their Team Members and their respective directors, officers, employees, advisors, counsel, accountants and other consultants and representatives must certify that they have complied with the requirements of Section 5.16 of the PPP Regulation by completing the Form of Respondent Certification included as Appendix A to this RFQ.





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## 2. Project Description

### 2.1 Puerto Rico

#### 2.1.1 Overview

Puerto Rico is a self-governing territory of the United States and is located in the Caribbean approximately 1,030 miles southeast of Miami, FL. Puerto Rico has an area of approximately 3,500 square miles and a population estimated at 3.34 million by the United States Census Bureau as of July 1, 2017.

Historically, Puerto Rico has had one of the largest and most dynamic economies in the Caribbean region. As a territory of the U.S. since 1898, Puerto Rico offers a stable legal and regulatory framework where major U.S. and foreign multi-national corporations have operated. Puerto Rico has a well-educated and bilingual workforce, and has been a global center for manufacturing, including in the pharmaceutical, biotechnology, medical devices, agriculture, rum, aerospace and electronics industries, which was complemented by strong consumer, retail and service sectors.

Generally, U.S. federal laws apply in Puerto Rico, and Puerto Rico is subject to the jurisdiction of the U.S. regulatory authorities, including the U.S. Environmental Protection Agency (EPA). Because it is a U.S. territory, the U.S. Federal Deposit Insurance Corporation (FDIC) insures banks operating in Puerto Rico, which are subject to the same federal controls applied to banks operating in the U.S. mainland. The U.S. Securities and Exchange Commission (SEC) regulates all publicly traded securities and commodities.

#### Key Puerto Rico Facts

Population	3.34 million
Land Area	8,959 sq. km (approx. 3,500 sq. mi)
Currency	U.S. Dollar
Languages	English, Spanish
GDP Per Capita	\$19,140

\* Data according to U.S. Census 2017 and the Puerto Rico Planning Board.

#### 2.1.2 Financial Condition and Title III Process

The Government and most of its public corporations are in the midst of a profound fiscal crisis. In June 2015, the Government created a working group tasked with analyzing the fiscal and economic situation of Puerto Rico. After a series of studies and analyses, this working group estimated Puerto Rico's consolidated budget and financing gap (including required pension payments and debt service on tax-supported debt) to be approximately \$59 billion between fiscal years 2017 and 2026. More recent studies show the projected five-year deficit (through fiscal year 2023) at \$34.7 billion.

The Government's balance sheet deterioration, coupled with continued structural budget imbalances between revenues and expenditures, and a lack of continuity and execution capacity in fiscal and economic plans led to the loss of capital markets access in 2015. This limited the Government's ability to make necessary infrastructure investments and to meet scheduled debt service payments.

Recognizing the delicate fiscal condition of Puerto Rico, the U.S. Congress enacted the Puerto Rico Oversight, Management, and Economic Stability Act ("PROMESA"), which was signed into law on June 30, 2016. PROMESA provides a series of mechanisms to achieve fiscal and budgetary balance and restore access to the capital markets to spur revitalization of infrastructure in Puerto Rico. PROMESA also established the FOMB, which is tasked with working with the people of Puerto Rico and the Government to create the necessary





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foundation for economic growth. The Government Fiscal Plan estimates the Government's consolidated outstanding debt and pension liabilities to be over \$120 billion, with more than \$70 billion in financial debt and more than \$50 billion in pension liabilities.

In July 2017, a voluntary petition for bankruptcy relief was filed on behalf of PREPA, commencing a case under Title III of PROMESA in the U.S. District Court for the District of Puerto Rico (the "**Title III Court**"). Upon the commencement of PREPA's Title III case, an automatic stay on litigation related to the financial indebtedness and other obligations of PREPA immediately went into effect.

The PPP Contract will need to comply with certain federal and local requirements and regulations, including PROMESA, which will be set forth in more detail in the RFP. The PPP Contract will also require the approval of the FOMB pursuant to the FOMB's Contract Review Policy effective as of November 6, 2017, in addition to the approval of others as described in Section 1.2 of this RFQ. The FOMB and its advisors are working closely with the Authority and PREPA throughout this process and are expected to be active participants in the process at all stages.

Similar to Chapter 9 of the U.S. Bankruptcy Code, PROMESA does not include an express provision requiring post-petition contracts to be approved by the Title III Court. The Private Partner, however, may wish to seek Title III Court authorization to ensure that the Private Partner receives its bargained-for consideration, and we anticipate that the Title III Court will issue one or more such orders to support the transaction. In addition, confirmation of a Plan of Adjustment in PREPA's Title III case may be required to release liens against PREPA's assets and help ensure that the Project is free and clear of all legacy liabilities.

### 2.1.3 Hurricanes and Recovery Efforts

In September 2017, Hurricanes Irma and Maria delivered devastating blows to Puerto Rico, resulting in the largest and most complex disaster response and recovery effort in recent U.S. history. Irma skirted the northern coast of Puerto Rico on September 6 and 7, 2017, as a Category 5 storm, causing significant flooding, regional power and water outages and other damage to Puerto Rico's infrastructure. On September 20, 2017, less than two weeks after Irma and before Irma's response operations had concluded, Maria made a direct strike over Puerto Rico as a Category 4 storm, causing widespread and unprecedented devastation and destruction. Maria resulted in loss of life and massive infrastructure and property damage, and severely affected Puerto Rico's population, economy, critical infrastructure, social service network, healthcare system and the Government.

On September 5 and 17, 2017, Governor Rosselló requested separate federal declarations of emergency and disaster for Puerto Rico in light of the effects of Hurricanes Irma and Maria. These requests were subsequently approved by the President of the United States (the "**President**"), paving the way for federal disaster assistance funding. On October 26, 2017, the President signed the Additional Supplemental Appropriations for Disaster Relief Requirements Act 2017, which provides \$36.5 billion in FY2018 emergency supplemental appropriations to the Federal Emergency Management Agency ("**FEMA**"), the Department of Agriculture and the Department of the Interior, a portion of which has been appropriated for Puerto Rico's energy system in connection with Irma and Maria disaster recovery efforts.

As Puerto Rico looks to the future, it sees the recovery effort as an opportunity not just to rebuild what was damaged, but also to transform Puerto Rico's energy system by implementing solutions that:

- are cost-effective and forward-looking;
- are resilient and built in accordance with consensus-based codes, specifications and standards;
- harness innovative thinking and best practices from around the world; and
- contribute to greater economic development, revitalization and growth of Puerto Rico (in alignment with broader Government efforts to achieve fiscal and economic stability).





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Puerto Rico will move forward in its economic and disaster recovery by investing in infrastructure, people and the environment. Federal funds from FEMA and other government entities will help in achieving this vision. In order to fully deliver on all of the economic, infrastructure and societal goals identified by the Government, private sector creativity and resources will need to be harnessed.

## 2.2 Electric Power T&D System

### 2.2.1 PREPA Overview

PREPA is a public corporation and instrumentality of the Government, created pursuant to Act No. 83-1941 of May 2, 1941, as amended. Its purpose is to provide electric power in a reliable manner, contribute to the general welfare and the sustainable development of Puerto Rico and maximize the benefits while minimizing the social, environmental and economic impacts of electric energy generation and distribution. PREPA's current objectives include reducing energy costs, promoting smart energy consumption and protecting the environment.

Strategies to achieve these objectives include:

- reducing operating expenses;
- increasing efficiency;
- minimizing energy theft;
- diversifying energy sources;
- establishing smart grid technologies for energy control and consumption monitoring; and
- maximizing the use of advanced technology.

PREPA has faced significant challenges in recent years including:

- significant leverage;
- a dated electrical system that is in a challenged condition due, in part, to substandard practices and chronic infrastructure underinvestment; and
- the geographic mismatch between supply and demand — much of the generation is located on the south side of the island while a majority of the demand is on the north side of the island, exacerbating the fragility of the whole system.

### 2.2.2 Current Status of the T&D System

The T&D system interconnects PREPA's power plants with major switching and load centers throughout Puerto Rico. The T&D system currently has 1,115 miles of transmission lines (230 kV and 115 kV), 1,376 miles of subtransmission lines (38kV) and 31,628 miles of distribution lines (13.2 kV through 4.16 kV). The T&D system includes 178 transmission centers, 60 115 kV substations, 279 38 kV substations and 822 private substations.

Even prior to Hurricanes Irma and Maria, the T&D system faced numerous challenges, including a significant lag in technological upgrades, an aging and deteriorated system, high vulnerability to weather conditions, inconsistent customer support and collections operations and limited access to capital markets. The damage caused by Irma and Maria has exacerbated these challenges and raised new ones.





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### 2.2.3 T&D System Transformation

Puerto Rico needs an upgraded grid to increase reliability and resiliency, reduce cost, facilitate distributed generation and allow for economic recovery of the island. Pursuant to Act 120, PREPA is authorized to carry out PPP transactions with respect to any function, service or facility of PREPA, including the T&D system. In turn, Act 120 designates the Authority as the only government entity authorized to determine and to be responsible for the functions, services or facilities for which PPPs will be established, subject to the priorities, objectives and principles established in the energy public policy and regulatory framework to be developed by the Government pursuant to Act 120.

Act 120 set in motion the development of a new regulatory framework for the electric sector. A working group was created under Act 120 to develop a new energy public policy and regulatory framework, in consultation with the Southern States Energy Board and the U.S. Department of Energy, among others. Proposed legislation to establish this new framework for Puerto Rico's energy sector was filed in the Puerto Rico legislature on October 17, 2018 (the "**Proposed Electric Sector Regulatory Framework**"). The Proposed Electric Sector Regulatory Framework is expected to be reviewed and refined by the legislature in the coming months, as provided by Section 9 of Act 120.

## 2.3 Project Structure

The Project contemplates PREPA entering into a long-term PPP Contract with a Private Partner. Throughout the term of the PPP Contract, the Government will retain ownership of and title to all T&D assets and the Private Partner will manage and operate the T&D system and assist with the procurement associated with, and the management and deployment of, federal funds received for the restoration of the T&D system.

### 2.3.1 Description

As currently envisioned, a single Private Partner will assume all rights and responsibilities related to the operation, maintenance and management of the T&D system. These rights and responsibilities are expected to include, among other things:

- operation and maintenance of the T&D assets and system, including street lights and meters;
- control center operations, including generation scheduling and economic system dispatch;
- integration of renewable generation and distributed energy resources;
- power procurement;
- end customer metering, service and support (including billing and collections);
- new service requests for secondary and primary connected customers;
- outage management and restoration;
- coordination of emergency planning and storm restoration and recovery;
- interfacing with regulators, including with respect to environmental compliance;
- general system planning, including sourcing, designing and implementing system growth and improvement;
- acting as a servicer in connection with any charges imposed in respect of legacy obligations; and
- ongoing public reporting.





In addition to the services typically performed by the operator of a T&D system, the Authority intends for the Private Partner to administer the federal disaster recovery funding available for the restoration of the T&D system. Under certain circumstances, the Private Partner may have the opportunity to make capital investments in the T&D system not otherwise paid for by federal disaster recovery funding.

Under the contemplated structure for the Project, the Private Partner's compensation will consist of a regulated base management fee, which will be supplemented by performance payments linked to established performance standards. The Authority is seeking a Private Partner capable of meeting or exceeding established operational and performance standards while complying with applicable rate and performance regulation.

### 2.3.2 Federal Disaster Recovery Funding

FEMA funds or other federal disaster recovery grant funding will be available to partially finance the restoration of the T&D system; however, the timing and amount of any FEMA or other federal disaster recovery grant proceeds are uncertain.

In the event that the Authority and PREPA advise the Private Partner that FEMA or other federal disaster recovery grant funding will be used for eligible work, the Private Partner will be required to cooperate with the Authority, PREPA and any applicable federal or other public entity partners to the fullest extent possible, including assisting with management of any repair or construction work for the T&D system, if so assigned by the Authority and/or PREPA, and coordination of any necessary elements of the work or grant application process.

Any grant funding made available to the T&D system will be subject to compliance with the terms of each FEMA or other federal disaster recovery grant. If FEMA or other federal disaster recovery grant funding is made available, the Private Partner will be required to comply with the terms and conditions of the applicable grants and sub-grants and the conditions required by the Authority and PREPA in order not to jeopardize the availability of such funding. This may include, but is not limited to, a requirement that the Private Partner execute an agency or similar agreement to facilitate the Private Partner's completion of any repair or construction work that may be assigned on behalf of the Authority and/or PREPA.

In the event that FEMA or other federal disaster recovery grant funding is made available for any repair or construction work for the restoration of the T&D system, such work must be separately procured by or for the account of PREPA in full compliance with the requirements of the PPP Regulation and the procurement rules set forth in 2 C.F.R. Part 200 and applicable to procurement by PREPA. Further, such work may only be awarded to a Team Member of the Private Partner, or to any entity deemed Related to the Private Partner or any Team Member, if that entity responds and is selected pursuant to a properly issued procurement consistent with the PPP Regulation and as consistent with and allowed by the Ethics Guidelines.





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### 3. Respondent Qualification Requirements and Evaluation Criteria

In order to provide an objective and transparent evaluation method, the PPP Committee will evaluate SOQs by applying the criteria outlined in the table below ("**Evaluation Criteria**"). Application of the Evaluation Criteria will assist the PPP Committee in identifying the Qualified Respondents.

Evaluation Criteria	
<b>Part 1</b>	<b>Compliance with Requirements of the PPP Act and Act 120</b>
	<i>Each SOQ submitted pursuant to this RFQ will be reviewed to determine whether it satisfies the requirements under the PPP Act, the PPP Regulation and Act 120 in the following areas:</i>
1.1	Respondents that are corporations, partnerships or any other legal entity, whether based in the U.S., including Puerto Rico, or elsewhere in the world, shall be properly registered, or capable of being properly registered, to do business in Puerto Rico at the time of the execution of the PPP Contract, and shall comply with all applicable Puerto Rico and U.S. laws and/or requirements.
1.2	Each Respondent and each Team Member shall certify that: <ul style="list-style-type: none"> <li>(a) neither it nor any of its directors, officers, controlling shareholders or subsidiaries, nor its parent company, nor in the case of a partnership, any of its partners, nor any person or entity that may be considered an alter ego or the passive economic agent of the Respondent or Team Member, as applicable, (each, a "<b>Covered Party</b>"), has been convicted, entered a guilty plea, been indicted or had probable cause found for their arrest in any criminal proceeding in Puerto Rico, the rest of the U.S. or any foreign jurisdiction for:                             <ul style="list-style-type: none"> <li>(i) any of the crimes referenced in Articles 4.2, 4.3 or 5.7 of Act No. 1-2012, as amended, known as the Organic Act of the Office of Government Ethics of Puerto Rico;</li> <li>(ii) any of the crimes typified in Articles 250 through 266 of Act No. 146-2012, as amended, known as the Puerto Rico Penal Code; or</li> <li>(iii) any of the crimes listed in Act No. 2-2018, as amended, known as the Anti-Corruption Code for a New Puerto Rico or any other felony that involves misuse of public funds or property, including but not limited to the crimes mentioned in Article 6.8 of Act No. 8-2017, as amended, known as the Act for the Administration and Transformation of Human Resources in the Government, or under the U.S. Foreign Corrupt Practices Act; nor is any Covered Party under investigation in any legislative, judicial or administrative proceedings, in Puerto Rico, the rest of the U.S. or any other jurisdiction;</li> </ul> </li> <li>(b) it is in compliance and shall continue to comply at all times with all federal, state, local and foreign laws applicable to the Respondent or Team Member(s) that prohibit corruption or regulate crimes against public functions or public funds, including the U.S. Foreign Corrupt Practices Act;</li> </ul>





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#### Evaluation Criteria

1.2  
(cont'd)

(c) it completed the SOQ without prior understanding, agreement, connection, discussion or collusion with any other person, firm or corporation submitting or participating in the submission of a separate SOQ or any officer, employee or agent of the Authority, PREPA, the PPP Committee, AAFAF, the Energy Bureau, the Government, the FOMB or any public agency of Puerto Rico; and

(d) except as provided in Section 1.9 of this RFQ, it shall not attempt to communicate in relation to this RFQ, directly or indirectly, with any representative of the Authority, PREPA, the PPP Committee, AAFAF, the Energy Bureau, the Government, the FOMB or any public agency of Puerto Rico, including any Restricted Parties or any director, officer, employee, agent, advisor, staff member, counsel, consultant or representative of any of the foregoing, as applicable, for any purpose whatsoever, including for purposes of:

(i) commenting on or attempting to influence views on the merits of the Respondent's and Team Members' SOQ, or in relation to their SOQ;

(ii) influencing, or attempting to influence, the outcome of the RFQ Process or of the competitive selection process, including the review and evaluation of SOQs or the selection of the Qualified Respondents;

(iii) promoting the Respondent and Team Members or their interests in the Project, including in preference to that of other Respondents or Team Members;

(iv) commenting on or criticizing aspects of this RFQ, the competitive selection process or the Project, including in a manner which may give the Respondent or its Team Members a competitive or other advantage over other Respondents or their respective Team Members; or

(v) criticizing the SOQs of other Respondents.

***Requirements 1.1 and 1.2 may be satisfied by completing the Form of Respondent Certification included as Appendix A to this RFQ.***





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### Evaluation Criteria

#### Part 2 Background & Team Information (15 pages maximum)

*Respondent and Team Member(s) are encouraged to provide enough supporting information and details to enable the evaluators to perform a thorough evaluation of their strengths, roles and responsibilities.*

- 2.1 A description of the Respondent and all Team Members that identifies:
  - anticipated roles, functions and overview of business operations;
  - jurisdiction, form of entity organization, ownership structure and capitalization;
  - currently and formerly owned or controlled electric utility operating companies;
  - anticipated legal relationships (e.g., joint ventures, partnerships) and percentage ownership interest;
  - up to five individuals who will play an important role in the Project on behalf of Respondent and Team Member(s) (the "**Key Individuals**") and their roles;
  - instances, if relevant, in which Respondent and Team Member(s) have previously worked together;
  - evidence of experience carrying out major infrastructure projects;
  - evidence and tenor of operations and management experience in electric power T&D (including experience with system dispatch, power purchase and/or operating agreements); and
  - experience administering FEMA and other federal disaster relief funding.
- 2.2 A list of technical, financial, legal, accounting or other advisors that Respondent or any Team Member has engaged or intends to engage in connection with the Project.
- 2.3 Respondent will be expected to have current or past large-scale electric utility operations and management experience. As such, Respondent or at least one Team Member must demonstrate that its current or previous electric utility operations and management fulfills the following criteria on a sustained basis:
  - at least 250,000 customers;
  - electric utility T&D rate base of at least \$2 billion; and
  - at least 1,000 employees.
- 2.4 Resumes (indicating overall experience and any specific experience relevant to the nature and scope of the Project) for the Key Individuals. It is expected that the anticipated management team will be comprised of individuals with at least ten years of relevant electric utility managerial experience for all executive-level positions.  
*(One page per resume maximum and resumes will not count towards the overall page count for Part 2)*





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#### Evaluation Criteria

##### Part 3 Financial Capabilities (10 pages maximum)

*The evaluation of financial capabilities will examine each SOQ in accordance with the criteria set out below:*

- 3.1 **Financial Capacity of Team:** Respondent must demonstrate adequate financial wherewithal to fulfill the terms of the PPP Contract. Each Respondent or, if a consortium, at least one Team Member, must provide:
- evidence of demonstrated track record of earned return on equity (ROE) approximating regulatory authorized return on equity (ROE);
  - evidence of experience with formal regulatory proceedings or similar rate justification proceedings in a U.S. or similar regulatory jurisdiction (may be full rate case proceedings or a private rate case settlement);
  - credit ratings (if any); and
  - copies of audited financial statements, Form 10-Ks or similar types of annual reports for the past two years, together with any other relevant financial information.

*(Audited financials & supporting information not included in page count)*

- 3.2 **Ability to Raise Financing:** Respondent must provide specific evidence demonstrating their ability to raise financing. Specific factors that will be assessed include:
- capability of raising significant quantities of debt and equity in the current capital markets;
  - the number and size of past relevant transactions; and
  - specific experiences on past relevant transactions.
- At a minimum each Respondent or at least one Team Member must provide evidence of at least five debt or equity raises, each of at least \$100 million in proceeds.





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#### Evaluation Criteria

##### Part 4 Technical & Operational Capabilities (50 pages maximum)

The evaluation of technical capabilities will examine each SOQ in accordance with the criteria set out below:

- 4.1 Respondent must demonstrate its technical and operational capabilities to fulfill the terms of the PPP Contract. Detailed evidence on the following criteria will be required for Respondent or at least one Team Member:
- for the past five years, operational metrics including SAIDI, SAIFI, CAIDI (customer average interruption duration index per the most recent key performance indicators published by the American Public Power Association), and OSHA (Occupational Safety and Health Administration) recordable events within acceptable industry standards for U.S. mainland utilities;
  - track record of sustained customer satisfaction;
  - experience with at least three large scale T&D projects, each with total investment of at least \$50 million;
  - certification of no significant or sustained environmental regulation violations; and
  - sustained history of reasonable customer rates (taking into account any unique local challenges).

Respondent and Team Member(s) should aim to provide sufficient evidence to demonstrate an intimate understanding of the power and electric utility industry, especially as it applies to owning, operating and dispatching large-scale electric utility T&D infrastructure. Operations, maintenance, improvements, vegetation management, customer service, community relations, safety and environmental responsibility should each be a key focus.

- 4.2 Respondent and Team Member(s) should describe their degree of experience:
- coordinating the safe, reliable and economic dispatch of electric utility systems, particularly those with significant reliance on renewable energy resources;
  - negotiating and executing power supply agreements, including tolling, take-or-pay or similar types of power supply agreements;
  - operating electric utility T&D infrastructure on an island or other stranded location in both urban and rural settings and under challenging natural circumstances, such as mountainous regions and dense vegetation growth;
  - operating electric utility T&D infrastructure in a natural disaster-prone region, including hurricanes, flooding, earthquakes and wildfires, and experience with post-event restoration and electrification;
  - system planning taking into account long-term customer demand projections to be met with electric supply, which may include integrated resource planning;
  - managing disaster recovery operations, federal disaster relief funding and relationships with FEMA and other government entities; and
  - operating electric utility T&D infrastructure that incorporates significant and expanding renewable project interconnection requests, generation capacity, distributed generation, advanced grid technology implementation, energy efficiency initiatives, energy storage and micro grids (if any).





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#### Evaluation Criteria

##### Part 5 Safety Performance (no page limit)

- 5.1 Respondent and Team Member(s) must demonstrate (a) their ability to address and resolve safety issues and (b) their knowledge of safety strategies and methodologies. Respondent and Team Member(s) must submit copies of the Occupational Safety and Health Administration (OSHA) 300 forms for the past three years, only as related to electric utility operations. If not applicable, Respondent and Team Member(s) must present a document explaining the reasons for not submitting the form.

*These may be included in an appendix.*







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## 4. SOQ Requirements & Procedure

### 4.1 SOQ Requirements

#### Overview of Requirements

***A physical copy of the original SOQ must be delivered no later than the Submission Deadline. Prospective Respondents that anticipate responding to this RFQ should so indicate as soon as possible by sending to the e-mail address listed below the necessary contact information. The SOQ must comply with the outline provided under "Required Information for SOQ" below and all other conditions identified in this RFQ. Additional information not specifically related to the Project or this RFQ should not be included in the SOQ. All questions or requests for information regarding this RFQ should be directed to the PPP Committee via e-mail, as provided in Section 1.9 of this RFQ. Please do not contact any officials or related parties of the Authority, PREPA, the PPP Committee, AAFAF, the Energy Bureau, the Government or the FOMB. Such contact may serve as grounds for disqualification.***

Address questions, comments, RFCs to:

Puerto Rico Electric Power T&D System PPP Committee

Request for Qualifications

Puerto Rico Electric Power T&D System Project

E-mail: [P3TDProject@p3.pr.gov](mailto:P3TDProject@p3.pr.gov)

#### No Liability for Costs

The Authority, PREPA, other agencies and instrumentalities of the Government and their respective advisors are not responsible for costs or damages incurred by Respondents, Team Members, subcontractors or other interested parties in connection with the solicitation or procurement process, including but not limited to costs associated with preparing responses, qualifications and proposals, and of participating in any conferences, oral presentations or negotiations, whether in connection with this RFQ Process, the RFP Process or otherwise. A Qualified Respondent will not be entitled to indemnity (including, but not limited to, reimbursement for costs and expenses) from the Authority, PREPA or any other agency or instrumentality of the Government if the Authority or PREPA decide, in their discretion, to terminate the procurement process for this Project.

#### Modification and Termination Rights

The Authority and PREPA reserve the right to modify or terminate the RFQ Process and the RFP Process for this Project at any stage if the Authority or PREPA determines such action to be in the public interest. The receipt of responses or proposals or other documents at any stage of either this RFQ or the RFP Process will in no way obligate the Authority or PREPA to enter into any contract of any kind with any party.





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## 4.2 Required Information for SOQ

### Compliance with this RFQ

The SOQ must be prepared in English and follow the format outlined below. Respondents may opt to submit responses in Word or PowerPoint templates. Responses must comply with the following format:

- Cover Page (to include identification of all management Team Members)
- Cover Letter (two pages maximum)
- Table of Contents
- Executive Summary (two pages maximum)
- The specific requirements as set out in Section 3 of this RFQ:

- **Part 1: Compliance with the Requirements of the PPP Act and Act 120 (No page limit)**

- An executed Respondent Certification from the Respondent and each Team Member. This Certification must strictly follow the form attached to this RFQ as Appendix A.
- An executed Document Acknowledgement and Contact Information letter from the Respondent (executed by the contact person ("**Respondent Representative**") for all future communication between the Authority and the Respondent). This letter must strictly follow the form attached to this RFQ as Appendix B.

- **Part 2: Background & Team Information (15 pages maximum)**

Respondents should address all areas referred to in the Evaluation Criteria set out in Section 3 of this RFQ, under the heading "Background & Team Information".

- **Part 3: Financial Capabilities (10 pages maximum)**

Respondents should address all areas referred to in the Evaluation Criteria set out in Section 3 of this RFQ, under the heading "Financial Capabilities".

- **Part 4: Technical & Operational Capabilities (50 pages maximum)**

Respondents should address all areas referred to in the Evaluation Criteria set out in Section 3 of this RFQ, with respect to "Technical Capabilities".

- **Part 5: Safety Performance (No page limit)**

Respondents should submit copies of the documents required by Section 3 of this RFQ with respect to safety performance. If not applicable, a Respondent should present a document explaining the reasons for not submitting such documents. Respondents must demonstrate (a) their ability to address and resolve safety issues, and (b) their knowledge of safety strategies and methodologies.

## 4.3 Reporting of Material Adverse Change

Prior to the issuance of the RFP documents, the Authority and PREPA may, in their discretion, request that a Respondent confirm that there have been no material changes to the information submitted with respect to the Respondent and/or any Team Member in the relevant SOQ. If there have been any material changes to the submitted information, the Respondent must provide details of such changes in accordance with any requirements the Authority or PREPA may impose at that time. The PPP Committee will evaluate the information





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submitted by the Respondent in accordance with the evaluation criteria set out in Section 3 of this RFQ, and may revise the results of the Respondent's evaluation.

#### 4.4 SOQ Submission Instructions

The Respondent must submit one originally executed SOQ, with signatures in blue ink and marked as "Original", and four copies along with one copy in portable document format (PDF) on a CD or USB flash drive. **A physical copy of the original SOQ must be delivered no later than the Submission Deadline, December 5, 2018 at 5:00 pm AST.** Respondents should not submit promotional materials as part of their SOQs and are strongly encouraged not to submit information that is not required by this RFQ. Respondents are strongly encouraged to be succinct in their SOQs. Respondents must limit their SOQs, or each component of their SOQs, to the maximum number of pages indicated in Section 4.2 of this RFQ. The PPP Committee will not review pages submitted in excess of the maximum number of pages indicated for such item. The SOQ must be labeled as follows:

=====

Puerto Rico Public-Private Partnerships Authority

Puerto Rico Electric Power T&D System PPP SOQ Submitted by *(Respondent's name and Address)*

The SOQ must be delivered to:

Puerto Rico Electric Power T&D System PPP

Puerto Rico Public-Private Partnerships Authority

Attn: Omar J. Marrero, Esq. — Executive Director

Puerto Rico Fiscal Agency and Financial Advisory Authority Building

(former GDB Building), 3rd Floor Roberto Sánchez Vilella Government Center, De Diego Avenue

San Juan, PR 00940-2001

=====

#### 4.5 Confidentiality of SOQ

All SOQs will become the property of the Authority and may become public in accordance with applicable law, except for documents or information submitted by Respondents that are trade secrets, proprietary information or privileged or confidential information of the Respondents. Respondents are advised to review the confidentiality and publication provisions contained in Sections 9(i) and 9(j) of the PPP Act and Section 9.3 of the PPP Regulation. In order to ensure that documents identified by Respondents as "confidential" or "proprietary" will not be subject to disclosure under the PPP Act, Respondents must label such documents as "confidential" or "proprietary," provide a written explanation of why such labeled documents are "confidential" or "proprietary," including why the disclosure of the information would be commercially harmful, specifically refer to any legal protection currently enjoyed by such information and why the disclosure of such information would not be necessary for the protection of the public interest, and request that the documents so labeled be treated as confidential by the PPP Committee according to the process described in the following paragraph.





If a Respondent has special concerns about confidential or proprietary information that it desires to make available to the PPP Committee prior to its SOQ, such Respondent may wish to:

- make a written request to the PPP Committee for a meeting to specify and justify proposed confidential or proprietary documents;
- make an oral presentation to the PPP Committee staff and legal counsel; and
- receive written notification from the PPP Committee accepting or rejecting confidentiality requests.

Failure to take such precautions prior to filing an SOQ may subject confidential or proprietary information to disclosure under Sections 9(i) and 9(j) of the PPP Act and/or Section 12.3 of the PPP Regulation.

The PPP Committee will evaluate all confidentiality requests according to the criteria indicated in the PPP Act and the PPP Regulation. The PPP Committee will determine whether or not the requested materials are exempt from disclosure. Upon such determination, the Authority will endeavor to maintain the confidentiality of any information that a Respondent indicates to be proprietary or a trade secret, or that must otherwise be protected from publication according to law, except as required by law or by a court order. In the event that the PPP Committee elects to disclose the requested materials, it will provide the Respondent notice of its intent to disclose, in which case the Respondent may request the immediate return of such materials prior to disclosure by the PPP Committee and they will thereafter form no part of the Respondent's submission. In no event will the Government, the Authority, the PPP Committee or PREPA be liable to a Respondent for the disclosure required by law or a court order of all or a portion of an SOQ filed with the Authority.

Upon execution of the PPP Contract, the PPP Committee is required to make public its report regarding the procurement process, which report will contain information related to the qualification, procurement, selection and negotiation process, and the information contained in the SOQ, except information that qualifies as trade secrets, confidential, proprietary or privileged information of the Respondent or its Team Members clearly identified as such by the Respondent, or information that must otherwise be protected from publication according to law, as may have been determined by the PPP Committee, unless otherwise required by law or by a court order.

#### 4.6 Use of Confidential Information

Each Respondent must declare, and agree to be under an obligation to declare, that it does not have knowledge of or the ability to avail itself of confidential information of the Government, PREPA or the Authority relevant to the Project, except to the extent it has been expressly authorized by the Government, PREPA or the Authority. Such confidential information:

- will remain the sole property of the Government, the Authority or PREPA, as applicable, and the Respondent and its Team Members will treat it as confidential;
- may not be used by the Respondent or its Team Members for any other purpose other than submitting an SOQ, RFP submission or the performance of any subsequent agreement relating to the Project with the Government, the Authority or PREPA, as applicable;
- may not be disclosed by the Respondent or any Team Member to any person who is not involved in the Respondent's preparation of its SOQ, RFP submission or the performance of any subsequent agreement relating to the Project with the Government, the Authority or PREPA, as applicable, without prior written authorization from the party in respect of whom the confidential information relates;
- if requested by the Government, the Authority or PREPA, will be returned or destroyed, as appropriate, no later than ten calendar days after such request; and
- may not be used in any way that is detrimental to the Government, the Authority or PREPA.





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Each Respondent and its Team Members will be responsible for any breach of the provisions of this Section 4.6 by any person to whom any of them discloses the confidential information. Each Respondent and its Team Members acknowledge and agree that a breach of the provisions of this Section 4.6 would cause the Authority, PREPA, the Government and/or their related entities to suffer loss which could not be adequately compensated by damages, and that the Authority, PREPA, the Government and/or any related entity may, in addition to any other remedy or relief, enforce any of the provisions of this Section 4.6 upon submission of the Respondent's SOQ to a court of competent jurisdiction for injunctive relief without proof of actual damage to the Authority, PREPA, the Government or any related entity.

The provisions in this Section 4.6 will survive any cancellation of this RFQ or the RFP and the conclusion of the RFQ Process and the RFP Process.

#### 4.7 Conflicts of Interest and Ineligible Persons

Each Respondent Representative submitting an SOQ on behalf of such Respondent and the Team Members of such Respondent must declare and continue to be under an obligation to declare all Conflicts of Interest or any situation that may be reasonably perceived as a Conflict of Interest that exists now or may exist in the future. A "Conflict of Interest" includes any situation or circumstance where in relation to the Project, the Respondent submitting an SOQ or any Team Member of such Respondent has other commitments, relationships or financial interests that:

- (a) could or could be seen to exercise an improper influence over the objective, unbiased and impartial exercise of the Authority's or PREPA's independent judgment; or
- (b) could or could be seen to compromise, impair or be incompatible with the effective performance of its obligations under the PPP Contract.

In connection with its SOQ, each Respondent and each Team Member will:

- (a) avoid any Conflict of Interest in relation to the Project;
- (b) disclose to the Authority and to PREPA without delay any actual or potential Conflict of Interest that arises during the RFQ Process or at any point in the procurement process; and
- (c) comply with any requirements prescribed by the Authority and PREPA to resolve any Conflict of Interest.

**Each Respondent is responsible for ensuring that all persons engaged to provide any type of assistance in connection with the Project are in compliance with the provisions of the Ethics Guidelines and, to the extent any question exists as to compliance with the Ethics Guidelines, the Respondent should consult with the Authority.**

In addition to all contractual or other rights or rights available at law or in equity or legislation, the Authority and PREPA may immediately exclude a Respondent or any of its Team Members from further consideration or remove the Respondent or any Team Member from the RFQ Process if:

- (a) the Respondent knew, or reasonably should have known, and fails to disclose an actual or potential Conflict of Interest;
- (b) the Respondent submitting an SOQ or a Team Member of such Respondent fails to comply with any requirements prescribed by the Authority or PREPA to resolve a Conflict of Interest; or
- (c) the Respondent's Conflict of Interest issue cannot be resolved.

Pursuant to Section 8.1 of the PPP Regulation, any person, by virtue of its participation in this RFQ Process, authorizes the Authority to apply to the relevant competent governmental authority to obtain further information





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regarding a prospective Respondent and in particular, details of convictions of the offenses listed in Section 9(c)(ii) of the PPP Act if the PPP Committee considers it necessary for its selection or evaluation process.

## 4.8 RFQ Miscellaneous Instructions

### Addenda to RFQ

The Authority reserves the right to amend this RFQ at any time. All amendments to this RFQ will be described in written addenda. Copies of each addendum will be available at the Authority's website: <http://www.p3.pr.gov>. Respondents are encouraged to review the Authority's web page regularly. All addenda will become part of this RFQ. In the event of any conflict in the wording or any issue of interpretation, addenda, when issued, will take priority over the original wording in this RFQ and any wording in prior addenda. Each Respondent will, in its SOQ, acknowledge receipt of each addendum. Each Respondent is solely responsible to ensure that it and its Team Members have received all communications issued by the Authority and PREPA. A failure to obtain any such communication is at the sole and absolute risk of the Respondent and its Team Members, and the Authority and PREPA accept no responsibility for the failure of any Respondent or Team Member to receive or obtain all RFQ information (including addenda). Each response to this RFQ is deemed to be made on the basis of the complete RFQ, as amended by any addenda, issued prior to the Submission Deadline.

### Withdrawal of SOQs

A Respondent may withdraw an SOQ by delivering to the Authority a written request for withdrawal prior to the Submission Deadline at the address for delivery of SOQs set forth in Section 4.4 of this RFQ. Any such withdrawal does not prejudice the right of a Respondent to submit another SOQ prior to the Submission Deadline.

## 4.9 Disclaimer

The information provided in this RFQ, or any other written or oral information provided by the Authority, PREPA, the PPP Committee, the Government or their respective officers, employees, advisors, counsel or consultants in connection with the Project or the selection process is provided for the convenience of the Respondents only. Respondents and their Team Members will make their own conclusions as to such information. Oral explanations or instructions from officials, employees, advisors, counsel or consultants of the Authority, PREPA, the PPP Committee or any Puerto Rico public agency will not be considered binding on the Authority, PREPA, the PPP Committee or the Government. The Authority, PREPA, the PPP Committee, the Government and their respective officers, employees, advisors, counsel and consultants make no representation or warranty as to any information provided in connection with this RFQ Process or the RFP Process. The accuracy and completeness of such information is not warranted by any of them and none of them will have any liability in connection with such information or the selection process, all of which liability is expressly waived by each Respondent and each Team Member of such Respondent. This RFQ is not an offer to enter into any contract of any kind whatsoever.

## 4.10 Reservation of Rights

In furtherance of the Authority's mission, the PPP Committee reserves the right to reject any and all SOQs, to waive technical defects, irregularities or any informality in SOQs, and to accept or reject any SOQs in its sole and absolute discretion. The PPP Committee also reserves the right to postpone the date on which SOQs are required to be submitted, or to take any other action it may deem in the best interests of the Authority and PREPA.





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In addition, the Authority and PREPA reserve all rights (which rights will be exercisable by the Authority and PREPA in their sole and absolute discretion) available to them under applicable laws and regulations, including, without limitation, with or without cause and with or without notice, the right to:

- (a) modify the procurement process to address applicable law and/or the best interests of the Authority, PREPA and the Government;
- (b) develop the Project in any manner that they deem necessary and change the limits, scope and details of the Project;
- (c) if the Authority and PREPA are unable to negotiate a PPP Contract to their satisfaction with a Private Partner, terminate the process or pursue other alternatives relating to the Project, or exercise such other rights as they deem appropriate;
- (d) cancel the procurement process, as applicable, in whole or in part, at any time prior to the execution by PREPA of the PPP Contract, without incurring any cost, obligation or liability whatsoever;
- (e) issue a new request for qualification after withdrawal of this RFQ;
- (f) reject or disqualify any and all SOQs and responses received at any time for any reason without any obligation, compensation or reimbursement to any existing or prospective Respondent or Team Member;
- (g) modify all dates, deadlines, process, schedule and other requirements set out, described or projected in this RFQ;
- (h) terminate evaluations of responses received at any time;
- (i) exclude any Respondent from submitting any response to this RFQ based on the failure to comply with any requirements;
- (j) issue addenda, supplements and modifications to this RFQ;
- (k) require direct confirmation of information furnished by a Respondent, additional information from a Respondent concerning its response or additional evidence of qualifications to perform the work described in this RFQ;
- (l) consider, in the evaluation of any SOQ, any instances of poor performance by a Respondent, Team Member or Key Individual that any of the Authority, PREPA or the Government may have experienced or experienced by a third party, whether one of the included references or otherwise;
- (m) seek or obtain data from any source that has the potential to improve the understanding and evaluation of the responses to this RFQ;
- (n) add or delete Respondent responsibilities from the information contained in this RFQ or any subsequent process instruments;
- (o) negotiate with any party without being bound by any provision in its response;
- (p) waive any deficiency, defect, irregularity, non-conformity or non-compliance in any response to this RFQ or permit clarifications or supplements to any response to this RFQ, and accept such response even if such deficiency, defect, irregularity, non-conformity or non-compliance would otherwise render the response null and void or inadmissible;
- (q) add or eliminate facility expansion to or from the Project;





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(r) incorporate this RFQ or any Respondent's response to this RFQ or portion thereto as part of the RFP Process or any formal agreement with a Private Partner; and

(s) exercise any other right reserved or afforded to the Authority and PREPA under the PPP Act, the PPP Regulation, this RFQ or applicable law.

This RFQ does not commit either the Authority or PREPA to enter into a contract or proceed with the Project as described herein. The Authority, PREPA and the Government assume no obligations, responsibilities or liabilities, fiscal or otherwise, to reimburse all or part of the costs incurred or alleged to have been incurred by parties considering a response to and/or responding to this RFQ, or in considering or making any submission. All of such costs will be borne solely by each Respondent.

#### 4.11 Limitation of Damages

Each Respondent, by submitting an SOQ, agrees that in no event will the Authority, PREPA, the PPP Committee, the Government or any of their respective directors, officers, employees, advisors, counsel or representatives be liable, under any circumstances, for any claim, demand, liability, damage, loss, suit, action or cause of action, whether arising in contract, tort or otherwise, and all costs and expenses relating thereto (each, a "**Claim**"), or to reimburse or compensate the Respondent, any Team Member or their respective directors, officers, employees, advisors, counsel, accountants and other consultants and representatives, in any manner whatsoever, including, without limitation, any costs of preparation of the SOQ or the response to the RFP, loss of anticipated profits, loss of opportunity or for any other matter. Without in any way limiting the above, each Respondent and Team Member of such Respondent specifically agrees that it will have absolutely no Claim against the Authority, PREPA, the PPP Committee or the Government or any of their respective directors, officers, employees, advisors, counsel or representatives if any such party for any reason whatsoever:

- does not select a list of Qualified Respondents;
- suspends, cancels or in any way modifies the Project or the solicitation process (including modification of the scope of the Project or modification of this RFQ or both);
- accepts any compliant or non-compliant response or selects a list of one or more Qualified Respondent(s);
- under the terms of this RFQ permits or does not permit a Restricted Party to advise, assist or participate as part of a Respondent or its Team Members; or,
- breaches or fundamentally breaches a contract or legal duty of the Authority, PREPA, the PPP Committee or the Government, whether express or implied, and each Respondent and each Team Member waives any and all Claims whatsoever, including Claims for loss of profits or loss of opportunity, if the Respondent is not selected as a Qualified Respondent for any other reason whatsoever.

#### 4.12 Judicial Review

Judicial review of the selection and award process for qualifications must be pursued in accordance with Section 20 (Judicial Review Procedures) of the PPP Act. Only those Respondents who comply with the applicable requirements set forth in Section 20 of the PPP Act may request judicial review of a final determination that a Respondent is not qualified. Mechanisms for requesting reconsideration before the Authority or PREPA will not be available.

Section 20 establishes the period within which to seek judicial review, for the Puerto Rico Court of Appeals to address the writ of review, and to seek a writ of certiorari before the Puerto Rico Supreme Court. Section 20 also prescribes the notification requirements and the consequences of seeking such judicial remedies, including that if either the Puerto Rico Court of Appeals or the Puerto Rico Supreme Court grants a writ of review or writ of





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certiorari, as applicable, the procedures for the qualification of respondents, or for the evaluation or selection of proposals or negotiation of the PPP Contract by the PPP Committee will not be stayed.

The qualification determinations of the PPP Committee and the approval of the PPP Contract by the Governor or the official onto whom he/she delegates, as provided under Section 9(g)(ii)-(v) of the PPP Act will only be overturned upon a finding of manifest error, fraud or arbitrariness. The non-prevailing party will defray the expenses incurred by the other parties involved in judicial review proceedings under Section 20 of the PPP Act. The Respondent that seeks judicial review may not, under any circumstance, as part of its remedies, claim the right to be redressed for indirect, special or foreseeable damages, including lost profits.

The above is only a succinct summary of Section 20 of the PPP Act and Respondents should review and understand such judicial review provisions.







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## APPENDIX A: FORM OF RESPONDENT AND TEAM MEMBERS CERTIFICATION

*[Letterhead of each Respondent or Team Member, as applicable]*

Mr. Omar J. Marrero, Esq. — Executive Director  
Puerto Rico Public-Private Partnerships Authority  
Roberto Sánchez Vilella Government Center  
De Diego Avenue, Parada 22  
San Juan, PR 00940-2001 USA

### Re: Puerto Rico Electric Power T&D System PPP - Request for Qualifications

Ladies and Gentlemen:

We have carefully reviewed the Request for Qualifications dated October 31, 2018 (“**RFQ**”) issued by the Puerto Rico Public-Private Partnerships Authority and all other documents accompanying or made a part of the RFQ. Capitalized terms used in this certificate have the meanings given to them in the RFQ.

We acknowledge and agree to comply with all terms and conditions of the RFQ, the attached Statement of Qualifications (“**SOQ**”) and all enclosures thereto. Without limitation, we specifically acknowledge the disclaimer contained in Section 4.9 of the RFQ and the limitation of damages contained in Section 4.11 of the RFQ.

We certify that the information contained in the attached SOQ is true and correct. We further certify that the individual who has signed and delivered this certification is duly authorized to submit the attached SOQ on behalf of the Respondent or Team Member, as applicable, as its acts and deed and that the Respondent or Team Member, as applicable, is ready, willing and able to participate in the RFP Process and perform if awarded the PPP Contract.

We further certify that we are *[describe the type of entity or entities (corporation, partnership, LLC, etc.)]* organized in *[indicate the jurisdiction of organization]* and the entity contemplated by Respondent and Team Members to be the one that shall execute the PPP Contract shall have no impediment to, and shall be authorized to do business in Puerto Rico and to enter into a contractual relationship with government entities in Puerto Rico, as well as to comply with any other applicable Puerto Rico or U.S. laws and/or requirements.

We further certify that our directors, officers, controlling shareholders or subsidiaries, parent company and, in the case of a partnership, our partners, and any person or entity that may be considered an alter ego or the passive economic agent of the Respondent or Team Member, as applicable (each, a “**Covered Party**”), have not been convicted, have not entered a guilty plea and have not been indicted, and probable cause has not been found for their arrest, in any criminal proceeding in Puerto Rico, the rest of the U.S. or any foreign jurisdiction, for (i) any of the crimes referenced in Articles 4.2, 4.3 or 5.7 of Act No. 1-2012, as amended, known as the Organic Act of the Office of Government Ethics of Puerto Rico, (ii) any of the crimes typified in Articles 250 through 266 of Act No. 146-2012, as amended, known as the Puerto Rico Penal Code or (iii) any of the crimes listed in Act No. 2-2018, as amended, known as the Anti-Corruption Code for a New Puerto Rico or any other felony that involves misuse of public funds or property, including but not limited to the crimes mentioned in Article 6.8 of Act No. 8-2017, as amended, known as the Act for the Administration and Transformation of Human Resources in the Government, or under the U.S. Foreign Corrupt Practices Act; no Covered Party is under investigation in any legislative,





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judicial or administrative proceedings, in Puerto Rico, the rest of the U.S. or any other jurisdiction. The Respondent and Team Members are in compliance with all federal, state, local and foreign laws applicable to the Respondent or Team Member(s) that prohibit corruption or regulate crimes against public functions or public funds, including the U.S. Foreign Corrupt Practices Act.

We further certify that we shall continue to comply at all times with laws which prohibit corruption or regulate crimes against public functions or funds, as may apply to the Respondent or any Team Member, as applicable, whether federal, state or Government statutes, including the Foreign Corrupt Practices Act.

We further certify that no officer or employee of the Authority, PREPA, the PPP Committee, AAFAF, the Energy Bureau, the Government, the FOMB or any public agency of Puerto Rico who participates in the selection process described in, or negotiations in connection with, the RFQ (nor any member of their families) has an economic interest in or is connected with the *[Respondent or Team Member, as applicable]*, and no officer or employees of the Authority, PREPA, the PPP Committee, AAFAF, the Energy Bureau, the Government, the FOMB or any public agency of Puerto Rico (nor any member of their families) has directly or indirectly participated with the *[Respondent or Team Member, as applicable]* in the preparation of its SOQ.

We further certify that we are in compliance with the provisions of Act No. 2 of 2018, also known as the Anti-Corruption Act 2018.

We further certify that we have reviewed the provisions of the Authority's Guidelines for the Evaluation of Conflicts of Interest and Unfair Advantages in the Procurement of Public-Private Partnership Contracts, available on the Authority's website: <http://www.p3.pr.gov>, and that we are in compliance therewith.

We further certify that this SOQ is made without prior understanding, agreement, connection, discussion or collusion with any other person, firm or corporation submitting or participating in the submission of a separate SOQ or any officer, employee or agent of the Authority, PREPA, the PPP Committee, AAFAF, the Energy Bureau, the Government, the FOMB or any public agency of Puerto Rico; and that the undersigned executed this Respondent and Team Members Certificate with full knowledge and understanding of the matters herein contained and was duly authorized to do so.

We further certify that Respondent and Team Members shall not, other than as permitted in the RFQ, attempt to communicate in relation to the RFQ, directly or indirectly, with any representative of the Authority, PREPA, the PPP Committee, AAFAF, the Energy Bureau, the Government, the FOMB or any public agency of Puerto Rico, including any Restricted Parties, or any director, officer, employee, agent, advisor, staff member, counsel, consultant or representative of any of the foregoing, as applicable, for any purpose whatsoever, including for purposes of: (a) commenting on or attempting to influence views on the merits of the Respondent's and Team Members' SOQ, or in relation to their SOQ; (b) influencing, or attempting to influence, the outcome of the RFQ process, or of the competitive selection process, including the review and evaluation of SOQs or the selection of the Qualified Respondents; (c) promoting the Respondent and Team Members or their interests in the Project, including in preference to that of other Respondents or Team Members; (d) commenting on or criticizing aspects of the RFQ, the competitive selection process, or the Project including in a manner which may give the Respondent or its Team Members a competitive or other advantage over other Respondents or their respective Team Members; and (e) criticizing the SOQs of other Respondents.

To the extent the Authority and PREPA determine to submit any of the costs incurred under the PPP Contract for federal reimbursement, the Respondent shall be required to comply with all applicable federal certification and requirements.

Federal regulations restrict PREPA from contracting with parties that are debarred, suspended or otherwise excluded from or ineligible for participation in federal assistance programs and activities, where the contract is funded in whole or in part with federal funds. The Respondent certifies that:

1. Neither it nor any of its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905), are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935) from participation in this transaction by any federal department or agency. SAM Exclusions is the list





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maintained by the General Services Administration that contains the name of parties excluded or disqualified, as well as parties declared ineligible under certain statutory or regulatory authority. The Respondent may verify its status and the status of its principals, affiliates and any actual or anticipated Team Members at [www.SAM.gov](http://www.SAM.gov).

2. The Respondent agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this proposal is valid and throughout the period of any contract that may arise from this proposal. The Respondent further agrees to include a provision requiring such compliance in its lower tier covered transactions.
3. This certification is a material representation of fact relied upon by the Authority and PREPA. If it is later determined that the Respondent did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the Authority and PREPA, the federal government may pursue available remedies, including but not limited to suspension and/or debarment.

The Respondent further certifies, to the best of its knowledge and belief, that:

1. No federal appropriated funds have been paid or will be paid, by or on behalf of the Respondent or any Team Member, to any person for influencing or attempting to influence an officer or employee of an agency, a member of the United States Congress, an officer or employee of the United States Congress or an employee of a member of the United States Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement and the extension, continuation, renewal, amendment or modification of any federal contract, grant, loan or cooperative agreement.
2. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of the United States Congress, an officer or employee of the United States Congress or an employee of a member of the United States Congress in connection with this federal contract, grant, loan or cooperative agreement, the undersigned shall complete and submit Standard Form- LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants and contracts under grants, loans and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.
4. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The undersigned Respondent and Team Members acknowledge that any violation or misrepresentation with respect to the above will prohibit their participation in any procurement process under the PPP Act and other applicable laws of Puerto Rico and, therefore, will be disqualified from participating hereunder.

The attached SOQ shall be governed by and construed in all respects according to the laws of Puerto Rico and the terms of the RFQ.

Our business address is:

*[Insert business address]*





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Yours faithfully,

*[Insert appropriate signature block for signature by a person duly authorized to bind the Respondent or Team Member]*







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## APPENDIX B: FORM OF DOCUMENT ACKNOWLEDGEMENT & CONTACT INFORMATION

*[Letterhead of the Respondent]*

Mr. Omar J. Marrero, Esq. — Executive Director  
Puerto Rico Public-Private Partnerships Authority  
Puerto Rico Fiscal Agency and Financial Advisory Authority Building, 3rd Floor  
Roberto Sánchez Vilella Government Center  
De Diego Avenue, Parada 22  
San Juan, PR 00940-2001 USA

Ladies and Gentlemen:

I, *[Name of Respondent Representative]* in my capacity as *[Title]* of *[Name of the Respondent]*, acknowledge on behalf of the Respondent and each Team Member that the Respondent (for itself and each anticipated Team Member) was able to access the Puerto Rico Public-Private Partnerships Authority (the "Authority") web site and downloaded the following documents regarding the Request for Qualifications ("RFQ") for the Puerto Rico Electric Power T&D System PPP (the "Project"), issued by the Authority on October 31, 2018. Our contact information for further notifications is included below. We accept the transmission of such additional notifications via electronic communications, but acknowledge and accept that we shall have the responsibility of periodically checking in the Public-Private Partnership Authority website (<http://www.p3.pr.gov>) for any and all official communications regarding the RFQ and other stages of the procurement process for the Project.

Document/File Title

Date Received/Downloaded

Respondent Representative Signature

Date

Contact Information: *[Respondent Representative name, title, company, address, electronic mail, telephone number]*





## **Exhibit D: Qualification Analysis and Shortlist Report**





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GOVERNMENT OF PUERTO RICO  
Puerto Rico Public-Private Partnerships Authority



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# QUALIFICATION ANALYSIS AND SHORTLIST REPORT

Puerto Rico Public-Private Partnership for the  
Electric Power  
Transmission and Distribution System

January 16, 2019

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**Confidential**





GOVERNMENT OF PUERTO RICO  
Puerto Rico Public-Private Partnerships Authority

**Qualification Analysis and Shortlist Report**

***Puerto Rico Electric Power Transmission and Distribution System***

January 16, 2019  
San Juan, Puerto Rico

**TO:** Members of the Partnership Committee  
**FROM:** Puerto Rico Public-Private Partnerships Authority  
**RE:** Puerto Rico Electric Power Transmission and Distribution System Project

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On October 31, 2018, the Puerto Rico Public-Private Partnership Authority (the “**Authority**”), acting in collaboration with the Puerto Rico Electric Power Authority (“**PREPA**”), issued a Request for Qualifications (the “**RFQ**”) from companies and consortia interested in managing and operating Puerto Rico’s electric power transmission and distribution (“**T&D**”) system, including the administration of federal disaster recovery funding (the “**Project**”) through a public-private partnership (“**PPP**”).

In response to the RFQ, the Authority received statements of qualifications (the “**SOQs**”) from five (5) prospective proponents (“**Respondents**”). This Qualification Process Report (this “**Report**”) describes the process followed to evaluate such SOQs and determine if the Respondents are qualified to participate as proponents in the next stage of the Project, which is the Request for Proposal (“**RFP**”) stage. Moreover, this Report sets forth the official list of the qualified Respondents selected by the Authority to proceed to the RFP stage. This Report consist of six (6) sections: (I) Background of the Project; (II) Background of the Qualification Process; (III) Description of the Evaluation Criteria; (IV) Description of each Respondent; (V) Outcome of SOQ Evaluations; and (VI) Conclusion.

Capitalized terms used but not otherwise defined in this Report have the meaning ascribed to them in, as applicable, the Public-Private Partnership Authority Act, Act No. 29-2009, as amended (“**Act 29**”), the Puerto Rico Electric System Transformation Act, Act No. 120-2018, as amended (“**Act 120**”), the Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Participatory Public-Private Partnerships Contracts under Act No. 29-2009, as amended (the “**Regulation**”), and the RFQ.

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## **I. Background on the Project**

The Authority, in collaboration with PREPA, is interested in procuring a long-term public-private partnership contract (“**PPP Contract**”) to manage, operate, maintain, rehabilitate, repair, refurbish, replace, improve and expand, as needed, Puerto Rico’s T&D system. This is a historic Project by which the Government of Puerto Rico (the “**Government**”) seeks to transform the T&D system into a world-class electrical grid. The Project is a key economic development initiative for Puerto Rico.

PREPA is a public corporation and instrumentality of the Government, created pursuant to Act No. 83-1941 of May 2, 1941, as amended. Its purpose is to provide electric power in a reliable manner, contribute to the general welfare and the sustainable development of Puerto Rico and maximize the benefits while minimizing the social, environmental and economic impacts of electric energy generation and distribution. PREPA’s current objectives include reducing energy costs, promoting smart energy consumption and protecting the environment.

The T&D system interconnects PREPA’s power plants with major switching and load centers throughout Puerto Rico. The T&D system currently has 1,115 miles of transmission lines (230 kV and 115 kV), 1,376 miles of subtransmission lines (38kV) and 31,628 miles of distribution lines (13.2 kV through 4.16 kV). The T&D system includes 178 transmission centers, 60 115 kV substations, 279 38 kV substations and 822 private substations.

Prior to Hurricane Irma (“**Irma**”) and Hurricane Maria (“**Maria**”), which impacted Puerto Rico in September 2017, the T&D system already faced numerous challenges, including a significant lag in technological upgrades, an aging and deteriorated system, high vulnerability to weather conditions, inconsistent customer support and collections operations and limited access to capital markets. The damage caused by Irma and Maria exacerbated these challenges and raised new ones.

Puerto Rico needs an upgraded grid to increase reliability and resiliency, reduce cost, facilitate distributed generation and allow for the economic recovery of Puerto Rico. Pursuant to Act 120, PREPA is authorized to carry out PPP transactions with respect to any function, service or facility of PREPA, including the T&D system. In turn, Act 120 designates the Authority as the only government entity authorized to determine and to be responsible for the functions, services or facilities for which PPPs will be established, subject to the priorities, objectives and principles established in the energy public policy and regulatory framework to be developed by the Government pursuant to Act 120.

The Project contemplates PREPA entering into a PPP Contract with a private sector company or consortium (such private sector company or consortium, the “**Private Partner**”). Throughout the term of the PPP Contract, the Government will retain ownership of and title to all T&D assets and the Private Partner will manage and operate the T&D system, as well as assist with the procurement associated with, and the management and deployment of, federal funds received for the restoration of the T&D system.



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As currently envisioned, a single Private Partner will assume all rights and responsibilities related to the operation, maintenance and management of the T&D system. These rights and responsibilities are expected to include, among others, the following:

- operation and maintenance of the T&D assets and system, including street lights and meters;
- control center operations, including generation scheduling and economic system dispatch;
- integration of renewable generation and distributed energy resources;
- power procurement;
- end-customer metering, service and support (including billing and collections);
- new service requests for secondary and primary connected customers;
- outage management and restoration;
- coordination of emergency planning and storm restoration and recovery;
- interfacing with regulators, including with respect to environmental compliance;
- general system planning, including sourcing, designing and implementing system growth and improvement;
- acting as a servicer in connection with any charges imposed in respect of legacy obligations; and
- ongoing public reporting.

In addition to the services typically performed by the operator of a T&D system, the Authority intends for the Private Partner to administer the federal disaster recovery funding available for the restoration of the T&D system. Under certain circumstances, the Private Partner may have the opportunity to make capital investments in the T&D system not otherwise paid for by federal disaster recovery funding.

Under the structure currently contemplated for the Project, the Private Partner's compensation will consist of a regulated base management fee, which will be supplemented by performance-based compensation payments linked to established performance standards.<sup>1</sup> The Authority is seeking a Private Partner capable of meeting or exceeding established operational and performance standards

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<sup>1</sup> Subject to outcome of the contract review and comment process and subsequent negotiations with the relevant participants in the RFP process.



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while complying with applicable rate and performance regulations.

## II. Background on Qualification Process

Pursuant to Act 29 and the Regulation, the board of directors of the Authority established a Partnership Committee for the Project on August 22, 2018 (the “**Partnership Committee**”). The Partnership Committee has the duty and responsibility to evaluate and prequalify those Respondents most suitable to participate in the RFP process as proponents for the Project.

Section 3.1 of the Regulation grants the Partnership Committee ample discretion to support its functions by way of contracting advisors for such purposes. Section 3.1 of the Regulation provides that the Partnership Committee may “contract, on behalf of the Authority, advisors, experts or consultants with the knowledge necessary to assist the Partnership Committee and the Authority in the adequate discharge of their functions.”

Likewise, Section 3.5 of the Regulation authorizes the Authority to “contract with consultants, advisors or agents to assist the Authority and the Partnership Committee in the review of the Proposals and the selection and negotiation process for a Partnership, and provide any other assistance that is deemed necessary or appropriate in connection with an Award of a Partnership Contract.”

Accordingly, the advisors engaged to assist the Authority and the Partnership Committee throughout the Project’s development and the issuance of the RFQ include the following, among others:<sup>2</sup>

- Cleary Gottlieb Steen & Hamilton LLP;
- CPM PR, LLC; and
- Pietrantoní Méndez & Álvarez, LLC.

The Regulation authorizes the Partnership Committee to qualify a limited number of Respondents in order to arrive at a shortlist for the Project. In Section 1.4 of the RFQ, the Partnership Committee (i) established that the aim of the RFQ is to enable the Partnership Committee to identify Respondents that, based on their SOQ, are deemed qualified by the Partnership Committee to participate in the RFP process (“**Qualified Respondents**”) and (ii) notified prospective respondents of the Authority’s right to limit in its absolute discretion the number of Respondents it considers to be qualified in order to arrive at a shortlist of Qualified Respondents that allows for an orderly procurement. Furthermore, the RFQ established specifically that the Partnership Committee reserves the right to disqualify a Respondent for any of the reasons stated in Sections

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<sup>2</sup> The Authority is also working with Citigroup Global Markets Inc., an advisor to the FOMB, and Ankura Consulting Group, LLC, an advisor to PREPA.



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8.1 and 8.2 of the Regulation, or if the Respondent:

- is ineligible to submit a proposal on one or more grounds specified in Act 120, Act 29 or the Regulation;
- fails to satisfy the standards established by the Partnership Committee with respect to the Respondent's required financial condition, or technical or professional ability and experience (as set forth in Section 4 of the RFQ); or
- fails to comply with the requirements of Sections 9(a) and/or 9(d) of Act 29, as applicable.

Pursuant to Section 8(b) of Act 29 and Section 3.1 of the Regulation, the Partnership Committee evaluated the SOQs and selected those Respondents best qualified to undertake the Project to proceed as Qualified Respondents. Specifically, the Partnership Committee evaluated each SOQ by considering the extent to which Respondents satisfied the evaluation criteria established in Section 4 of the RFQ, as described below (the "**Evaluation Criteria**"):

- compliance with requirements of Act 120 and Act 29;
- required technical or professional ability or experience; and
- required financial condition.

The Partnership Committee reviewed each of the five (5) SOQs and scored each Respondent according to the strength to which its SOQ satisfied the Evaluation Criteria. Each Respondent was scored five times—once by each member of the Partnership Committee—resulting in five (5) sets of five (5) scores. The five sets of scores for each Respondent were averaged into a single set of scores, which produced an average aggregate score for each Respondent (the "**Average Aggregate Score**"). The review and evaluation process was conducted and completed by the Partnership Committee over several meetings held to assess and discuss the SOQs received in connection with the RFQ.

### **III. Description of the Evaluation Criteria**

In order to provide an objective and transparent evaluation method, Respondents were evaluated pursuant to Section 8(b) of Act 29 and Section 3.1 of the Regulation, and by considering the extent to which Respondents satisfied the evaluation criteria and requirements and procedures established in Sections 3 and 4 of the RFQ (the "**Evaluation Criteria**"). Specifically, Respondents were evaluated by reference to the following Evaluation Criteria:

#### ***Part 1 - Compliance with Requirements of Act 29 and Act 120 (Pass/Fail)***

Each SOQ submitted pursuant to the RFQ was reviewed to determine whether it satisfied the



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requirements under Act 29, Act 120 and the Regulation in the following areas:

- 1.1 Respondents that are corporations, partnerships or any other legal entity, whether based in the U.S., including Puerto Rico, or elsewhere in the world, were required to be properly registered, or demonstrate that they were capable of being properly registered, to do business in Puerto Rico at the time of the execution of the PPP Contract, and comply with all applicable Puerto Rico and U.S. laws and/or requirements.
- 1.2 Each Respondent and each Team Member was required to certify that:
  - (a) neither it nor any of its directors, officers, controlling shareholders or subsidiaries, nor its parent company, nor in the case of a partnership, any of its partners, nor any person or entity that may be considered an alter ego or the passive economic agent of the Respondent or Team Member, as applicable, (each, a “**Covered Party**”), has been convicted, entered a guilty plea, been indicted or had probable cause found for their arrest in any criminal proceeding in Puerto Rico, the rest of the U.S. or any foreign jurisdiction for:
    - i. any of the crimes referenced in Sections 4.2, 4.3 or 5.7 of Act No. 1-2012, as amended, known as the Organic Act of the Office of Government Ethics of Puerto Rico;
    - ii. any of the crimes typified in Sections 250 through 266 of Act No. 146-2012, as amended, known as the Puerto Rico Penal Code; or
    - iii. any of the crimes listed in Act No. 2-2018, as amended, known as the Anti-Corruption Code for a New Puerto Rico or any other felony that involves misuse of public funds or property, including but not limited to the crimes mentioned in Section 6.8 of Act No. 8-2017, as amended, known as the Act for the Administration and Transformation of Human Resources in the Government, or under the U.S. Foreign Corrupt Practices Act; nor is any Covered Party under investigation in any legislative, judicial or administrative proceedings, in Puerto Rico, the rest of the U.S. or any other jurisdiction;
  - (b) it is in compliance and shall continue to comply at all times with all federal, state, local and foreign laws applicable to the Respondent or Team Member(s) that prohibit corruption or regulate crimes against public functions or public funds, including the U.S. Foreign Corrupt Practices Act;
  - (c) it completed the SOQ without prior understanding, agreement, connection, discussion or collusion with any other person, firm or corporation



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submitting or participating in the submission of a separate SOQ or any officer, employee or agent of the Authority, PREPA, the Partnership Committee, the Puerto Rico Fiscal Agency and Financial Advisory Authority (known by its Spanish acronym “AAFAF”), the Puerto Rico Energy Bureau created by Act 57-2014, as amended, to regulate, monitor and enforce the energy public policy of the Government (“PREB”), the Government, the Financial Oversight and Management Board for Puerto Rico (the “FOMB”) or any public agency of Puerto Rico; and

- (d) except as provided in Section 1.9 of the RFQ, it shall not attempt to communicate in relation to the RFQ, directly or indirectly, with any representative of the Authority, PREPA, the Partnership Committee, AAFAF, the Energy Bureau, the Government, the FOMB or any public agency of Puerto Rico, including any Restricted Parties or any director, officer, employee, agent, advisor, staff member, counsel, consultant or representative of any of the foregoing, as applicable, for any purpose whatsoever, including for purposes of:
- i. commenting on or attempting to influence views on the merits of the Respondent’s and Team Members’ SOQ, or in relation to their SOQ;
  - ii. influencing, or attempting to influence, the outcome of the RFQ process or of the competitive selection process, including the review and evaluation of SOQs or the selection of the Qualified Respondents;
  - iii. promoting the Respondent and Team Members or their interests in the Project, including in preference to that of other Respondents or Team Members;
  - iv. commenting on or criticizing aspects of the RFQ, the competitive selection process or the Project, including in a manner which may have given the Respondent or its Team Members a competitive or other advantage over other Respondents or their respective Team Members; or
  - v. criticizing the SOQs of other Respondents.

Respondents could satisfy requirements 1.1 and 1.2 by completing the Form of Respondent Certification included as Appendix A to the RFQ.

***Part 2 - Background and Team Information (10%)***

Respondent and Team Member(s) were encouraged to provide enough supporting information and details to enable the evaluators to perform a thorough evaluation of their strengths, roles and



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responsibilities. This included the following:

- 2.1 Respondents were required to provide a description of the Respondent and all Team Members that identified:
  - (a) anticipated roles, functions and overview of business operations;
  - (b) jurisdiction, form of entity organization, ownership structure and capitalization;
  - (c) currently and formerly owned or controlled electric utility operating companies;
  - (d) anticipated legal relationships (e.g., joint ventures, partnerships) and percentage ownership interest;
  - (e) up to five (5) individuals who are expected to play an important role in the Project on behalf of Respondent and Team Member(s) (the “**Key Individuals**”) and their roles;
  - (f) instances, if relevant, in which Respondent and Team Member(s) had previously worked together;
  - (g) evidence of experience carrying out major infrastructure projects;
  - (h) evidence and tenor of operations and management experience in electric power T&D (including experience with system dispatch, power purchase and/or operating agreements); and
  - (i) experience administering federal disaster relief funding.
- 2.2 A list of technical, financial, legal, accounting or other advisors that the Respondents or any Team Member(s) had engaged or intended to engage in connection with the Project.
- 2.3 Respondents were expected to have current or past large-scale electric utility operations and management experience. As such, Respondents or at least one Team Member were required to demonstrate that their current or previous electric utility operations and management fulfills the following criteria on a sustained basis:
  - (a) at least 250,000 customers;
  - (b) electric utility T&D rate base of at least US\$2 billion; and
  - (c) at least 1,000 employees.



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- 2.4 Respondents were required to provide resumes (indicating overall experience and any specific experience relevant to the nature and scope of the Project) for the Key Individuals. Respondents were expected to identify an anticipated management team comprised of individuals with at least ten (10) years of relevant electric utility managerial experience for all executive-level positions.

### ***Part 3 - Financial Capabilities (30%)***

The evaluation of the financial capabilities of each SOQ was examined in accordance with the criteria set out below:

- 3.1 **Financial Capacity of Team:** Respondents were required to demonstrate adequate financial wherewithal to fulfill the terms of the PPP Contract. Each Respondent or, if a consortium, at least one Team Member, must provide:
- (a) evidence of demonstrated track record of earned return on equity (ROE) approximating regulatory authorized return on equity (ROE);
  - (b) evidence of experience with formal regulatory proceedings or similar rate justification proceedings in a U.S. or similar regulatory jurisdiction (may be full rate case proceedings or a private rate case settlement);
  - (c) credit ratings (if any); and
  - (d) copies of audited financial statements, Form 10-Ks or similar types of annual reports for the past two years, together with any other relevant financial information.
- 3.2 **Ability to Raise Financing:** Respondent must provide specific evidence demonstrating their ability to raise financing. Specific factors assessed include:
- (a) capability of raising significant quantities of debt and equity in the current capital markets;
  - (b) the number and size of past relevant transactions; and
  - (c) specific experiences on past relevant transactions.

At a minimum each Respondent or at least one Team Member was required to provide evidence of at least five (5) debt or equity raises, each of at least US\$100 million in proceeds.

### ***Part 4 - Technical & Operational Capabilities (50%)***

The evaluation of the technical and operational capabilities of each SOQ was examined in



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accordance with the criterion set out below:

- 4.1 Respondents were required to demonstrate their technical and operational capabilities to fulfill the terms of the PPP Contract. Detailed evidence on the following criteria was required for Respondent or at least one (1) Team Member:
- (a) for the past five (5) years, operational metrics including SAIDI, SAIFI, CAIDI (customer average interruption duration index per the most recent key performance indicators published by the American Public Power Association), and OSHA (Occupational Safety and Health Administration) recordable events within acceptable industry standards for U.S. mainland utilities;
  - (b) track record of sustained customer satisfaction;
  - (c) experience with at least three (3) large scale T&D projects, each with total investment of at least US\$50 million;
  - (d) certification of no significant or sustained environmental regulation violations; and
  - (e) sustained history of reasonable customer rates (taking into account any unique local challenges).

Respondents and Team Member(s) were asked to aim to provide sufficient evidence to demonstrate an intimate understanding of the power and electric utility industry, especially as it applies to owning, operating and dispatching large-scale electric utility T&D infrastructure. The RFQ indicated that operations, maintenance, improvements, vegetation management, customer service, community relations, safety and environmental responsibility were a key focus.

- 4.2 Respondents and Team Member(s) were encouraged to describe their degree of experience:
- (a) coordinating the safe, reliable and economic dispatch of electric utility systems, particularly those with significant reliance on renewable energy resources;
  - (b) negotiating and executing power supply agreements, including tolling, take-or-pay or similar types of power supply agreements;
  - (c) operating electric utility T&D infrastructure on an island or other stranded location in both urban and rural settings and under challenging natural circumstances, such as mountainous regions and dense vegetation growth;



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- (d) operating electric utility T&D infrastructure in a natural disaster-prone region, including hurricanes, flooding, earthquakes and wildfires, and experience with post-event restoration and electrification;
- (e) system planning taking into account long-term customer demand projections to be met with electric supply, which may include integrated resource planning;
- (f) managing disaster recovery operations, federal disaster relief funding and relationships with relevant government entities; and
- (g) operating electric utility T&D infrastructure that incorporates significant and expanding renewable project interconnection requests, generation capacity, distributed generation, advanced grid technology implementation, energy efficiency initiatives, energy storage and micro grids (if any).

#### ***Part 5 - Safety Performance (10%)***

The evaluation of the safety performance capabilities of each SOQ was examined in accordance with the criterion set out below:

- 5.1 Respondents and Team Member(s) were required to demonstrate (a) their ability to address and resolve safety issues and (b) their knowledge of safety strategies and methodologies. Respondents and Team Member(s) were required to submit copies of the Occupational Safety and Health Administration (OSHA) 300 forms for the past three (3) years, only as related to electric utility operations. If not applicable, Respondents and Team Member(s) were required to present a document explaining the reasons for not submitting the form.

#### ***Part 6 - Compliance with SOQ Requirements and Procedures (Pass/Fail)***

Each SOQ submitted pursuant to the RFQ was reviewed to determine whether it satisfied the following Requirements and Procedures set forth in the RFQ:

- 6.1 Respondents were required to prepare their SOQs in English, comply with the specifications set forth in the RFQ and include the following components and sections in their SOQs:
  - (a) cover page (including identification of all management Team Members);
  - (b) cover letter (two (2) pages maximum);
  - (c) table of contents;
  - (d) executive summary (two (2) pages maximum); and



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- (e) the specific requirements set forth in Section 3 of the RFQ (as outlined above):
  - i. Part 1: Compliance with the Requirements of Act 29 and Act 120 (no page limit);
  - ii. Part 2: Background & Team Information (fifteen (15) pages maximum);
  - iii. Part 3: Financial Capabilities (ten (10) pages maximum) ;
  - iv. Part 4: Technical & Operational Capabilities (fifty (50) pages maximum); and
  - v. Part 5: Safety Performance (no page limit).

6.2 Respondents were required to:

- (a) deliver a physical copy of its original, completed SOQ to the Authority by 5:00 pm AST on the Submission Deadline; and
- (b) submit one (1) originally executed SOQ, with signatures in blue ink and marked as “Original”, and four copies along with one copy in portable document format (PDF) on a CD or USB flash drive.

Respondents were given the option to submit responses in Word or PowerPoint templates.

6.3 Each Respondent was required to declare, and agree to be under an obligation to declare, that it does not have knowledge of or the ability to avail itself of confidential information of the Government, PREPA or the Authority relevant to the Project, except to the extent it has been expressly authorized by the Government, PREPA or the Authority.

#### **IV. Description of each Respondent**

The Authority received five (5) responses to the RFQ from the following Respondents:

- Duke Energy Corporation (“**Duke**”);
- Exelon Corporation (“**Exelon**”);
- ITC Holdings, Corp (“**ITC**”);
- Public Service Enterprise Group Incorporated (“**PSEG**”); and



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- a consortium comprised of ATCO Ltd. (“**ATCO**”), Innovative Emergency Management, Inc. (“**IEM**”) and Quanta Services, Inc. (“**Quanta**,” and together with ATCO and IEM, the “**Quanta Consortium**”).

The table below indicates the order and times in which the SOQs were received.

Submission of SOQs			
No.	Respondent	Date	Time
1	Duke	December 4, 2018	4:15 pm AST
2	PSEG	December 4, 2018	4:28 pm AST
3	Quanta Consortium	December 5, 2018	10:23 am AST
4	Exelon	December 5, 2018	4:54 pm AST
5	ITC	December 5, 2018	4:56 pm AST

Below is a brief description of each of the Respondents. These descriptions are provided merely for ease of reference and summarize each Respondent’s principal characteristics. The Partnership Committee evaluated all Respondents in accordance with the criteria set forth in the RFQ and strictly based upon the information provided in their SOQs. The Respondents are listed in alphabetical order.

#### 1. Duke

- Duke is an energy holding company headquartered in Charlotte, NC, and owns Duke Energy Carolinas, Duke Energy Progress, Duke Energy Florida, Duke Energy Indiana and Duke Energy Ohio, which are regulated utilities.
- Duke’s utilities (i) employ more than 28,000 people and (ii) serve approximately 7.6 million customers covering 95,000 square miles across six states. Duke’s T&D system spans more than 295,000 line miles.
- Duke’s large-scale projects include, among others, (i) the modernization of the energy generation and T&D infrastructure in the western regions of North Carolina and South Carolina for US\$2 billion, (ii) a T&D and storage system infrastructure improvement project in Indiana for \$1.4 billion and (iii) three (3) microgrid development projects in North Carolina.

#### 2. Exelon

- Exelon is a utility services holding company engaged, through Exelon Generation, in the energy generation business, and through Commonwealth Edison Company, PECO Energy Company, Baltimore Gas and Electric Company, Potomac Electric Power



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Company, Delmarva Power & Light Company and Atlantic City Energy Company in the energy delivery business, organized under Exelon Utilities.

- Exelon serves over 8.9 million utility electric customers and 1.3 million utility gas customers across the six (6) utilities.
- Exelon had operating revenues of US\$33.5 billion in 2017.

### 3. ITC

- ITC has 16,000 circuit miles of transmission in four (4) operating companies across seven states with approximately 700 employees. The company has invested US\$7.5 billion to improve, harden and expand the T&D system and facilitate interconnection of over 7,200 MW of renewable generation resources. Additionally, ITC's parent company, Fortis, Inc., owns and operates nearly 90,000 miles of distribution lines across the Fortis family of affiliates.
- ITC's large-scale projects under development include, among others, (i) a 73-mile, 1,000 MW, bi-directional, submarine HVDC line under Lake Erie connecting Ontario, Canada to Pennsylvania, and (ii) a 2,000 MW, closed-loop pumped storage hydro facility in northwest Arizona.

### 4. PSEG

- PSEG has approximately US\$43 billion of assets and a market capitalization of approximately US\$27 billion.
- PSEG has four principal, wholly-owned, direct subsidiaries:
  - Public Service Electric and Gas Company, an electric transmission and distribution and gas distribution utility with over 100 years of operations, over 2.2 million electric customers and 1.6 million gas customers, and approximately 7,200 employees.
  - PSEG Power LLC, a generation business, which has interests in approximately 13,000 MW of capacity and has approximately 2,400 employees.
  - PSEG Long Island LLC, which operates and manages Long Island Power Authority's T&D system.
- PSEG's large scale projects include a project in New Jersey to upgrade overhead transmission lines to 230kV in 12 stations worth approximately US\$739 million, and a US\$975 million project to upgrade overhead transmission line (50 miles) and underground transmission lines (19 miles) in 11 stations.



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## 5. Quanta Consortium

- Quanta is an integrated infrastructure solutions provider for the electric power, oil and gas and telecommunication industries in North America with over 41,000 employees and over US\$10.5 billion in annual revenues.
- ATCO is an experienced operator of T&D systems, as well as natural gas T&D utilities in North America. ATCO operates over 54,000 miles of T&D lines, servicing a territory covering over 165,000 square miles, and employs approximately 7,000 people.
- IEM is a global security consulting firm specializing in emergency management. IEM is currently managing recovery efforts for Hurricane Harvey in Texas, Hurricanes Irma, Matthew, and Hermine in Florida, Hurricane Matthew in North Carolina, Hurricane Sandy in New Jersey and New York, and the great floods of 2016 in Louisiana. Combined with existing projects, IEM is currently managing 1,208 IEM and subcontractor staff for programs totaling billions in federal dollars.
- Quanta and ATCO have worked together on an extensive list of large scale projects over the past ten (10) years, including PPP projects involving the 500 kV western Fort McMurray transmission line and the 500 kV eastern Alberta transmission line.

## V. Outcome of SOQ Evaluations

In accordance with the authority granted to the Partnership Committee's pursuant to Act 29, Act 120 and the Regulation, the Authority and its advisors assisted the Partnership Committee in evaluating each of the SOQs. The Partnership Committee subsequently met with the Authority and its advisors to discuss the SOQs. In particular, the Authority and its advisors provided the Partnership Committee with an overview of each Respondent and its SOQ and an analysis of their observations and recommended scoring pursuant to the Evaluation Criteria.

After reviewing the Authority's assessment of the SOQs, the Partnership Committee conducted a comprehensive analysis of the SOQs in light of the objectives and needs of the Project. Based on this analysis and subsequent discussions, the Partnership Committee (i) calculated each Respondent's Average Aggregate Score and (ii) determined the shortlisted Respondents who would be invited to participate in the RFP process.



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The table below breaks down each Respondent's Average Aggregate Score based on compliance with the Evaluation Criteria.

Evaluation Criteria					
	Duke	Exelon	ITC	PSEG	Quanta Consortium
<i>Part 1</i>	Pass	Pass	Fail	Pass	Pass
<i>Part 2</i>	8.3%	9.6%	7.7%	9.6%	9.8%
<i>Part 3</i>	30.0%	30.0%	8.0%	28.0%	27.0%
<i>Part 4</i>	45.0%	47.0%	26.0%	47.0%	49.0%
<i>Part 5</i>	9.5%	10.0%	5.5%	9.5%	9.5%
<i>Part 6</i>	Pass	Pass	Fail	Pass	Pass
<b>Average Aggregate Score</b>	<b>92.8%</b>	<b>96.6%</b>	<b>47.2%</b>	<b>94.1%</b>	<b>95.3%</b>

Based on the results summarized in the table above and in accordance with the authority granted to it pursuant to Act 29, Act 120 and the Regulation, the Partnership Committee decided to shortlist the following four (4) Respondents to participate in the RFP process:

- Duke;
- Exelon;
- PSEG; and
- the Quanta Consortium.

The table below indicates how the Respondents who qualified to proceed to the RFP stage ranked based on the Average Aggregate Scores (pursuant to the scoring described above).

Ranking of Qualified Respondents		
Respondent	Average Aggregate Score	Rank
Exelon	96.6%	1
Quanta Consortium	95.3%	2
PSEG	94.1%	3
Duke	92.8%	4



Partnership Committee  
Qualification Analysis and Shortlist Report  
Puerto Rico Electric Power Transmission and Distribution System Project  
January 16, 2019

The Partnership Committee decided to disqualify ITC from the RFQ process for failure to comply with the following requirements:

- Failure to complete the Form of Respondent Certification (Appendix A to the RFQ) or provide a statement stating that the Respondent shall comply with all applicable Puerto Rico and U.S laws and/or requirements, as required by Part 1 (Section 3 of the RFQ).
- Failure to complete the Form of Document Acknowledgement & Contact Information (Appendix B to the RFQ) for all future communications between the Authority and the Respondent, as required by Part 1 (Section 3 of the RFQ).
- Failure to submit one copy of the SOQ in portable document format (PDF) on a CD or USB flash drive, as required by Part 6 (Section 4.4 of the RFQ).
- Failure to declare that it did not have knowledge of, or the ability to avail itself of, confidential information of the Government, PREPA or the Authority relevant to the Project, except to the extent it has been expressly authorized by the Government, PREPA or the Authority, as required by Part 6 (Section 4.6 of the RFQ).

In addition, the Partnership Committee believes that the four (4) shortlisted Respondents demonstrated significantly higher operational and/or financial capabilities to meet all of the Project's objectives than ITC, as evidenced by the fact that each of the shortlisted Respondents received an Average Aggregate Score of over ninety percent (90%), whereas ITC received an Average Aggregate Score that was below fifty percent (50%).

The Partnership Committee carefully considered the number of Respondents that would be qualified for inclusion in the shortlist, in accordance with its right to shortlist under the Regulation and the RFQ. In determining the size of the shortlist, the Partnership Committee considered various factors, including: (i) selecting the best qualified Respondents for the Project; (ii) the need to maximize competitive tension in the procurement process for the Project; and (iii) ensuring an efficient and effective procurement process during the RFP stage. The Partnership Committee believes that the number of shortlisted Respondents achieves a desirable balance for the next phase of the process.

## **VI. Conclusion**

The shortlisted Respondents will provide the RFP process with the necessary competitive bidding environment needed to achieve the objectives of the Authority and the Government for this procurement process and meet the public policy considerations set forth in Act 120 and Act 29.





Partnership Committee  
Qualification Analysis and Shortlist Report  
Puerto Rico Electric Power Transmission and Distribution System Project  
January 16, 2019

Approved and received by the Partnership Committee Members:

*Original copy signed*

**Christian Sobrino, Esq.**

*CEO & President*

Fiscal Agency and Financial Advisory  
Authority

*Original copy signed*

**Edison Aviles**

*Chairman*

Puerto Rico Energy Bureau

*Original copy signed*

**José Ortiz**

*Executive Director*

Puerto Rico Electric Power Authority

*Original copy signed*

**Ralph Kreil**

*Vice-president Board of Directors*

Puerto Rico Electric Power Authority

*Original copy signed*

**Jorge Morales**

*Acting Director*

Puerto Rico Industrial Development  
Company





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# **Exhibit E: PREPA Management Presentation**





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Exhibit E: PREPA Management Presentation







## DISCLAIMER



This Management Presentation has been prepared at the direction of and from materials and information supplied by the Puerto Rico Electric Power Authority ("PREPA" or the "Company") in conjunction with the Puerto Rico Public-Private Partnerships Authority (the "Authority") and the Government of Puerto Rico (the "Government") in connection with a potential negotiated public-private partnership transaction (the "Transaction") related to the transformation of Puerto Rico's electric system. The Management Presentation (references to which shall be deemed to include any information which has been or may be supplied in writing or orally in connection herewith or in connection with any further inquiries) is being delivered pursuant to a separate confidentiality agreement (the "Confidentiality Agreement") between the Authority and the recipient, a shortlisted proponent identified by the Public-Private Partnership Committee (the "PPP Committee") established pursuant to the Public-Private Partnership Act, Act No. 29-2009, as amended. The Management Presentation is for the exclusive use of the persons to whom it is addressed and their advisers. Citigroup Global Markets Inc. ("Citi") is acting as the financial advisor to the Financial Oversight and Management Board for Puerto Rico (the "Oversight Board") in connection with the proposed Transaction.

By its acceptance hereof, each recipient agrees (in addition to any obligations it may have under the Confidentiality Agreement) (i) that neither it nor its agents, representatives, directors, officers, employees, advisors, counsel and consultants will copy, reproduce or distribute to others this Management Presentation, in whole or in part, at any time without the prior written consent of the Authority, (ii) that it will keep confidential this Management Presentation and all information contained herein in accordance with the provisions of the Confidentiality Agreement and (iii) that it will use this Management Presentation for the sole purpose of evaluating the Transaction.

No representation or warranty, express or implied, is or will be given by the Company, the Authority, the PPP Committee, the Government, the Oversight Board or Citi or their respective agents, representatives, directors, officers, employees, advisors, counsel and consultants or any other person as to the accuracy, completeness or fairness of this Management Presentation and no responsibility or liability whatsoever is accepted for the accuracy or sufficiency thereof or for any errors, omissions or misstatements, negligent or otherwise, relating thereto. Only those particular representations and warranties made by the Company in a definitive public-private partnership agreement, when and if one is executed, and subject to such limitations and restrictions as may be specified in such agreement, shall have any legal effect.

This Management Presentation includes certain statements, estimates, targets and projections provided by the Company with respect to the past, present and anticipated future performance of the Company. Such statements, estimates, targets and projections reflect significant assumptions and subjective judgments by the Company's management concerning past, present and anticipated results. These assumptions and judgments may or may not prove to be correct and there can be no assurance that any estimates, targets or projections are attainable or will be realized. None of the Company, the Authority, the PPP Committee, the Government, the Oversight Board, Citi or any of their respective directors, officers, partners, employees, advisors, counsel or consultants, or any other person, assumes responsibility for verifying any such statements, estimates, targets and projections. None of the Company, the Authority, the PPP Committee, the Government, the Oversight Board, Citi or any of their respective directors, officers, partners, employees, advisors, counsel or consultants, or any other person, shall be liable for any direct, indirect or consequential loss or damages suffered by any person as a result of relying on any statement in or omission from this Management Presentation and any such liability is expressly disclaimed. In all cases, interested parties should conduct their own investigation and analysis of the Company, the Transaction and the information contained in this Management Presentation.

Except where otherwise indicated, this Management Presentation speaks as of the date hereof. Neither the delivery of this Management Presentation nor the consummation of the Transaction shall, under any circumstances, create any implication that there has been no change in the affairs of the Company since the date hereof. In furnishing this Management Presentation, none of the Company, the Authority, the PPP Committee, the Government, the Oversight Board or Citi undertakes any obligation to update any of the information contained herein or to correct any inaccuracies which may become apparent.

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This Management Presentation does not constitute an offer or invitation for the sale or purchase of the securities, assets or business described herein or any form of commitment or recommendation on the part of the Company, the Authority, the PPP Committee, the Government, the Oversight Board or Citi.





Exhibit E: PREPA Management Presentation

TODAY'S AGENDA		
Topic	Primary Presenters	
8:00 – 8:30am	Registration	—
8:30 – 8:40am	Opening Remarks	<b>Alejandro Figueroa</b> Utility Sector Transformation Manager, Financial Oversight & Management Board
8:40 – 8:50am	Vision for the Puerto Rico Energy Sector / P3 Updates	<b>Fermin Fontanes</b> Chief Legal Counsel of the Puerto Rico Public-Private Partnerships Authority
8:50 – 9:00am	Introduction to PREPA and the Transformation	<b>Eli Diaz, Eng.</b> Chairman of the PREPA Governing Board
9:00 – 9:15am	Project Management Office / Transformation Execution Support	<b>José Ortiz, Eng.</b> CEO of PREPA <b>Fernando Padilla</b> Project Management Office Administrator
9:15 – 10:45am	Future State of the System	<b>Eduardo Batailla</b> Navigant Consulting <b>Nelson Bacalao</b> Siemens Power Technologies International
10:45 – 11:00am	<b>Morning Break</b>	—
11:00 – 12:00pm	Overview of the Current T&D System	<b>Jose Sepulveda, Eng.</b> Director of Transmission and Distribution
12:00 – 1:00pm	System Operations	<b>Gary Sofo, Eng.</b> System Operations Manager
1:00 – 1:45pm	<b>Lunch Break</b>	—
1:45 – 2:45pm	Customer Service and Billing	<b>Norlette Figueroa-Meléndez</b> Director of Customer Services
2:45 – 3:15pm	Environmental Overview	<b>Efran Paredes, Eng.</b> Director of Planning and Environmental Protection
3:15 – 4:15pm	Human Resources and Safety	<b>Marc Thys, Esq.</b> Director of Human Resources and Labor Affairs
4:15 – 4:30pm	<b>Afternoon Break</b>	—
4:30 – 5:15pm	Information Technology	<b>Hiram Medero-Fernandez</b> Chief Strategy and Innovation Officer
5:15 – 5:45pm	Financial Overview	<b>Nelson Morales</b> Director of Finance
5:45 – 6:15pm	Q&A	—





Exhibit E: PREPA Management Presentation

TODAY'S AGENDA – AFTERNOON BREAKOUT SESSIONS		
Topic	Primary Presenters	
1:45 – 2:45pm	Regulatory Framework	Pietrantonì Méndez & Álvarez LLC
2:45 – 3:45pm	Puerto Rico Law Considerations	Pietrantonì Méndez & Álvarez LLC
3:45 – 4:45pm	Federal Funding	<b>Omar Marrero</b> Executive Director of the Puerto Rico Public-Private Partnerships Authority





Exhibit E: PREPA Management Presentation

**OPENING REMARKS**



**Broad Alignment on the Transformation of the Puerto Rico  
Electric Power Authority ("PREPA")**

5





## INTRODUCTION TO TODAY'S SPEAKERS (TRANSFORMATION OVERSIGHT) P3

### Presenter

#### Christian Sobrino



*CEO and President of the Puerto Rico Fiscal Agency and Financial Advisory Authority*

- Additionally is President of the Government Development Bank of Puerto Rico and holds the position of Chief Advisor on Economic Development to Governor Ricardo Rosselló
- Previously held roles as director of ethics and compliance at AbbVie's Puerto Rico affiliate and as a corporate attorney at San Juan based law firm Pietrantonio Méndez & Álvarez

#### Omar Marrero



*Executive Director of the Puerto Rico Public-Private Partnerships Authority*

- Additionally is Executive Director of both the Puerto Rico Ports Authority and the Puerto Rico Convention Center District Authority
- Previously served as Vice President of the PREPA Board of Directors and Secretary of the Department of Consumer Affairs of Puerto Rico and has substantial experience as an attorney in the private sector

#### Fermin Fontanes



*Chief Legal Counsel of the Puerto Rico Public-Private Partnerships Authority*

- Has been in current role since March 2018
- Has substantial private sector experience as an attorney at the firms O'Neill & Borges, McConnell Valdes, and Ogletree Deakins specializing in Environmental, Energy and Land Use law

#### Alejandro Figueroa



*Utility Sector Transformation Manager, Financial Oversight and Management Board ("FOMB")*

- Has been in current position since June 2018
- Previously held positions as General Counsel and Deputy General Counsel at the Puerto Rico Energy Commission





# INTRODUCTION TO TODAY'S SPEAKERS (PREPA)



## Presenter



**Eli Diaz, Eng.**

*Chairman of the PREPA Governing Board*

- Serves as Executive President of the Puerto Rico Aqueduct & Sewer Authority ("PRASA")
- Previously served as the Executive Director of the Puerto Rico Solid Waste Authority and as the Legal Director of the Puerto Rico Public-Private Partnerships Authority



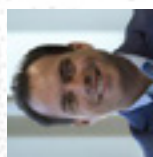
**José Ortiz, Eng.**

*CEO of PREPA*

- Joined PREPA as CEO in July 2018
- Previously served as Executive President of the Puerto Rico Aqueduct and Sewer Authority from 2007 – 2013
- Previously served as the VP of Development at Wyndham Worldwide Corporation

**Fernando Padilla**

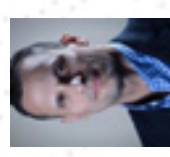
*Project Management Office ("PMO") Administrator*



- Joined PREPA in 2017 as a restructuring advisor, and shortly thereafter appointed as PMO leader in December 2017
- Prior to joining PREPA, served at the Government Development Bank for Puerto Rico as Advisor to the President under the Fiscal Agency Team as a member of the PREPA restructuring team
- Served under Program Management at Honeywell Aerospace Organization

**Efran Paredes, Eng.**

*Director of Planning and Environmental Protection*







- 15 years of experience at PREPA
- Has held various positions at PREPA including General Engineer Supervisor, and Planning and Research Division Head
- Previously served as Deputy Advisor in Energy and Environment at the Office of the Governor as well as a Lecturer in the Electrical Engineering Department at the Polytechnic University of Puerto Rico

## Roles and Responsibilities

- Determination of PREPA's policies and procedures, and general oversight of PREPA overall
- Put into effect the Governing Board's administrative policy
- Supervision of PREPA operations
- Lead development of the PMO office and compliance initiatives with efforts related to PREPA's certified Fiscal Plan and reporting requirements to Executive Management and the FOMB
- Negotiate key PREPA contracts
- Develop and implement the PREPA certified Fiscal Plan
- Short- and long-term development of generation resources and T&D infrastructure
- Environmental compliance
- Preparation of PREPA's capital improvement plan





INTRODUCTION TO TODAY'S SPEAKERS (PREPA)	
Presenter	Roles and Responsibilities
 <p><b>Jose Sepulveda, Eng.</b> <i>Director of Transmission and Distribution</i></p> <ul style="list-style-type: none"> <li>20 years of experience at PREPA</li> <li>Has held various positions in the T&amp;D division, including Supervising Engineer, Senior Supervising Engineer, and Regional Administrator</li> <li>Became Director of T&amp;D in November 2017, and was closely involved in Hurricane emergency response and restoration</li> </ul>	<ul style="list-style-type: none"> <li>Operation, maintenance, and construction of the T&amp;D system</li> <li>Establish the public policy procedures and regulations necessary for the operation, maintenance, and construction of the electrical system</li> </ul>
 <p><b>Humberto Campán, Eng.</b> <i>Administrator, Transmission and Distribution</i></p> <ul style="list-style-type: none"> <li>13 years of experience at PREPA</li> <li>Has held various positions at PREPA such as Intermediate Supervisor Engineer in the Special Investigation Laboratory and Ingress Supervisor Engineer in the Meter Shop</li> </ul>	<ul style="list-style-type: none"> <li>Operation, maintenance, and construction of the T&amp;D system</li> </ul>
 <p><b>Gary Soto, Eng.</b> <i>System Operations Manager</i></p> <ul style="list-style-type: none"> <li>23 years of experience at PREPA</li> <li>Has held various positions in the generation and transmission operation areas, including emergency response for all storms, hurricanes, and major events since 1996</li> <li>Led the operations team for system restoration during the Aguirre plant event (Sept. 2016) and Hurricanes Irma and María (Sept. 2017)</li> </ul>	<ul style="list-style-type: none"> <li>Economic dispatch of generation</li> <li>Operation of the transmission (230 kV and 115 kV) and sub-transmission systems (38 kV)</li> <li>Administers the Energy Management System and Operational Technology</li> <li>Operations of the helicopter fleet for inspections and construction</li> </ul>
 <p><b>Noriette Figueroa-Meléndez</b> <i>Director of Customer Service</i></p> <ul style="list-style-type: none"> <li>21 years of experience at PREPA</li> <li>Has held various positions in PREPA such as Head of Customer Service Division, Senior Analyst, Automatic Meter Read Analyst and Testing Leader in Customer Care &amp; Billing implementation</li> </ul>	<ul style="list-style-type: none"> <li>Policy and procedures related to commercial services, including all technical, operational, and administrative activities</li> </ul>









INTRODUCTION TO TODAY'S SPEAKERS (PREPA)	
Presenter	Roles and Responsibilities
 <p><b>Marc Thys, Esq.</b> <i>Director of Human Resources and Labor Affairs</i></p> <ul style="list-style-type: none"> <li>• 24 years of experience at PREPA</li> <li>• Previously was Head of Special Procedures Subdivision at PREPA</li> <li>• Has held various positions at the Office of Management and Budget, Tourism Company of Puerto Rico, Department of Justice, the Governor's Office, and Department of Agriculture</li> </ul>	<ul style="list-style-type: none"> <li>• Policies and procedures related to the management of human capital and the health of PREPA</li> <li>• Directs and supervises all activities of Personnel, Labor Issues, Occupational Health, and Resource Management</li> <li>• Directs and administers policies related to occupational safety</li> </ul>
 <p><b>Shehaly Rosado-Flores</b> <i>Chief of Occupational Safety Division</i></p> <ul style="list-style-type: none"> <li>• 24 years of experience at PREPA</li> <li>• Has held various positions within PREPA including Construction Inspector and Supervisor</li> <li>• Professor of electronics and electricity</li> </ul>	
 <p><b>Hiram Medero-Fernandez</b> <i>Chief Strategy and Innovation Officer</i></p> <ul style="list-style-type: none"> <li>• 34 years of experience at PREPA</li> <li>• Has held various positions within PREPA including General Superintendent of the Generation, Transmission and Distribution Directorate and Division Head of the Maintenance and Technical Services Power Plants Division</li> </ul>	<ul style="list-style-type: none"> <li>• Responsible for all information technology ("IT"), operational technology ("OT"), and all information systems</li> </ul>
 <p><b>Nelson Morales</b> <i>Director of Finance</i></p> <ul style="list-style-type: none"> <li>• 3 years of experience at PREPA</li> <li>• Has held various positions within the public sector, including CFO for the Puerto Rico Ports Authority and Deputy Executive Director at the Municipal Revenues Collection Center</li> <li>• Prior to joining the public sector, held various management positions in the financial services industry in New York and Puerto Rico, including at Lehman Brothers, Merrill Lynch, Pierce, Fenner &amp; Smith Inc., and Citigroup Financial Services</li> </ul>	<ul style="list-style-type: none"> <li>• Planning and administering all financial matters including accounting, budget, disbursements, and activities related to PREPA insurance</li> </ul>





Exhibit E: PREPA Management Presentation

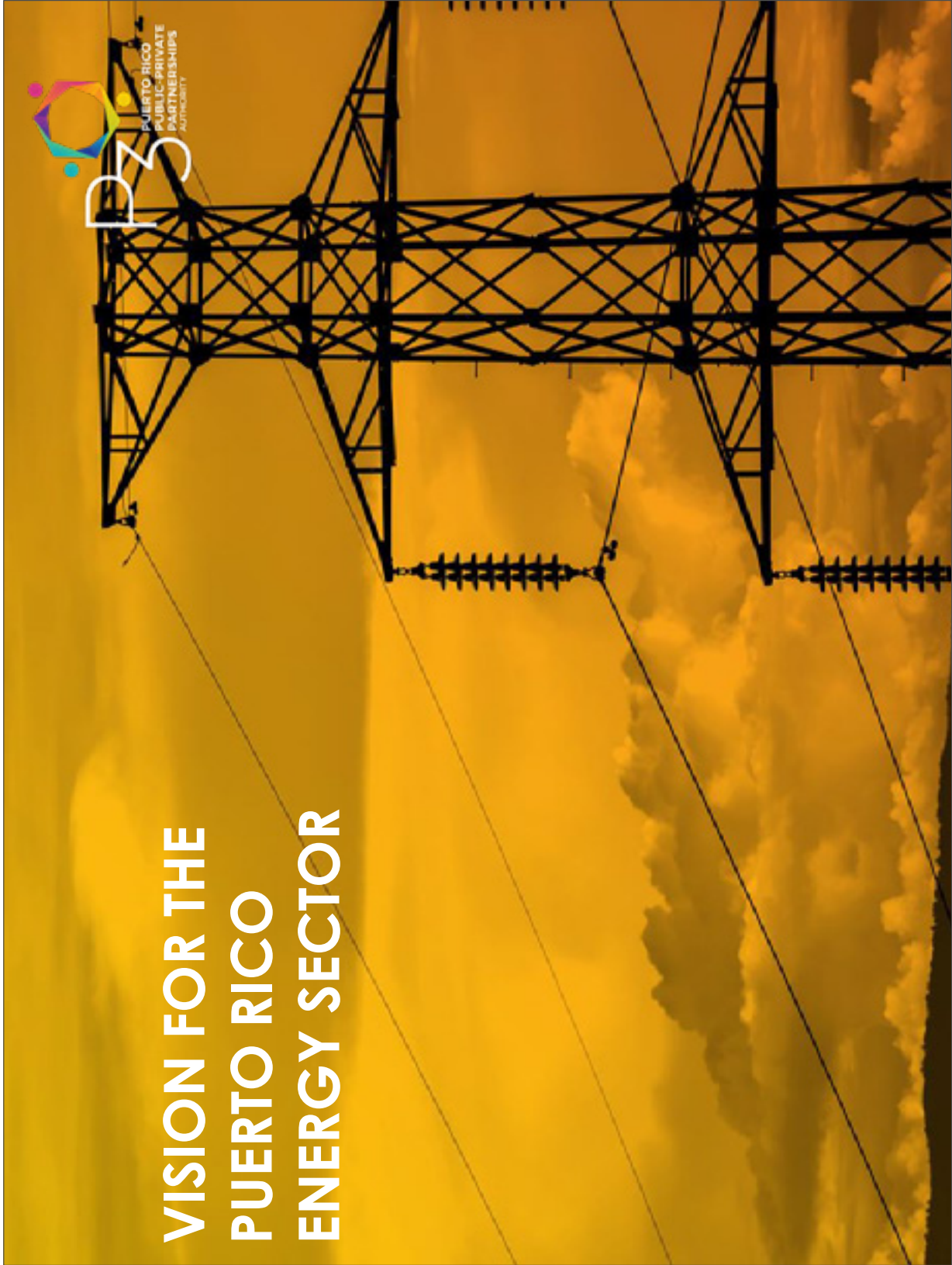






Exhibit E: PREPA Management Presentation

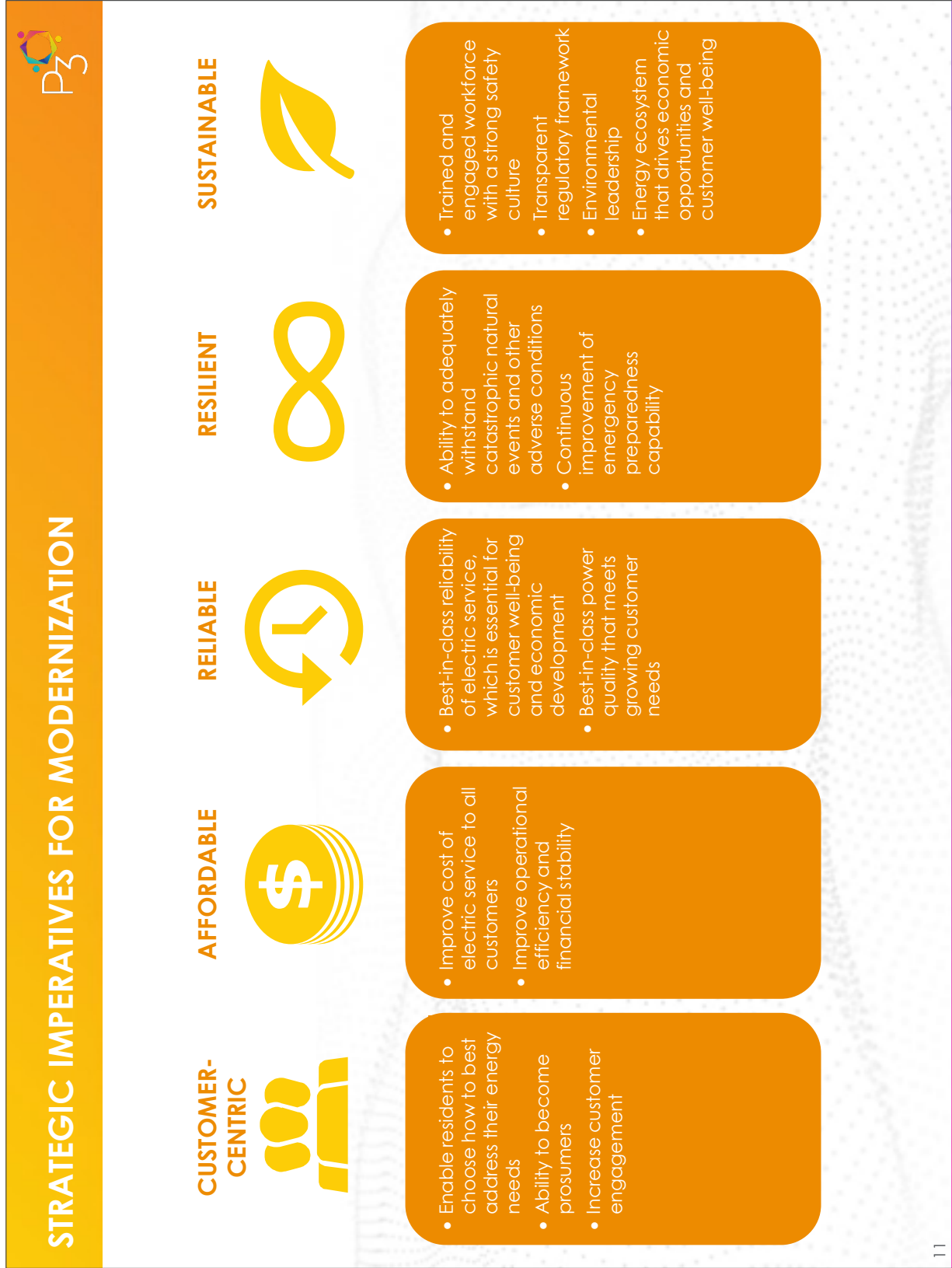






Exhibit E: PREPA Management Presentation

## GRID MODERNIZATION STRATEGY & APPROACH

PUERTO RICO'S VISION IS TO TRANSFORM THE ENERGY SYSTEM THROUGH THE INCORPORATION OF MORE RENEWABLES, MINIGRIDS, AND DISTRIBUTED ENERGY RESOURCES, WHICH WILL ULTIMATELY DRIVE ECONOMIC OPPORTUNITIES AND CUSTOMER WELL-BEING.

- The Grid Modernization Plan ("GridMod") focuses on five key strategic imperatives in order to modernize Puerto Rico's energy sector into a customer-centric, affordable, reliable, resilient, and sustainable system
- The GridMod leverages technical work completed by all relevant parties including PREPA, COR3<sup>1</sup>, the Homeland Security Operational Analysis Center ("HSOAC"), the Federal Emergency Management Agency ("FEMA"), the U.S. Department of Energy ("DOE"), the New York Power Authority ("NYPA"), the Large Public Power Council ("LPPC"), and PREPA's Integrated Resource Plan ("IRP") led by Siemens
  - Reviewed hurricane damage sustained to generation and the T&D system and evaluated the overall system configuration, technology used on the island, and what would be needed to achieve industry standard levels of reliability and resiliency
  - Incorporates input from a range of Puerto Rico stakeholders and technical experts
- Modernization efforts include near-term projects that address current reliability and quality as well as the long-term development and reconstruction of the full energy system
  - Damaged facilities must be rebuilt to current industry standards, and a reconstruction effort designed to achieve industry standard reliability and resiliency requires the reconfiguration and expansion of the Puerto Rico power system to a more decentralized operating model

T&D

- Seek a qualified private T&D operator (the "Private Party") to manage, operate and maintain T&D system
- Upgrade T&D infrastructure to current industry codes and standards
- Implement minigrids and microgrids for critical infrastructure and remote communities
- Design system to withstand extreme Category 4 hurricanes, with sufficient margins to survive Category 5 winds
- Reinforce substations, poles, and conductors to withstand catastrophic events
- Leverage modern grid technologies to lower number of outages and operational costs, reduce recovery times, enhance network communications and control systems, and enable integration of significant renewable and distributed resources
- Identify and implement emergency planning, response, and coordination improvements related to customer engagement and the use of mutual aid

The Private Party will be responsible for executing the GridMod strategy as well as assisting in the deployment of related federal funding

Generation

- Transfer existing generation assets to private ownership and / or operations; establish framework wherein future generation assets are privately owned / operated
- Reduce reliance on fuel oil and overall fuel cost
- Modernize generation fleet, retiring inefficient units and increasing the development of renewable energy and natural gas-fired facilities
- Invest in facility repairs and enhancements to improve system resiliency
- Leverage proven energy storage, distributed energy, and minigrid technologies to provide greater flexibility, reliability, and resiliency of energy supply
- Improve dispatch capabilities by implementing modern technologies
- Improve overall system operational flexibility

All new generation will be owned and / or operated by private entities, with the near- to mid-term goal of fully separating ownership of the T&D and generation assets

Core Objectives for the Permanent Reconstruction Effort

1. The Puerto Rico Central Office of Recovery, Reconstruction, and Resiliency ("COR3"). COR3 is a division of the Puerto Rico Public-Private Partnership Authority (the "Authority") created to identify, procure, administer, and coordinate federal activities related to PREPA's reconstruction.





## NEAR-TERM GENERATION INITIATIVES AND PROCUREMENT



PREPA RECENTLY COMPLETED THE COMPETITIVE PROCUREMENT PROCESS FOR THE CONVERSION OF SAN JUAN 5&6. THE AUTHORITY IS CURRENTLY ENGAGED IN OTHER INITIATIVES TO IMPROVE PUERTO RICO'S GENERATION FLEET.

### San Juan 5 & 6 Fuel Conversion (Completed – PREPA)

- PREPA has entered into a contract with New Fortress Energy for the natural gas supply and conversion of San Juan units 5 & 6 to natural gas
- **Contract Term:** Initial 5 year period with options for PREPA to extend 3 additional 5 year periods
- **Counterparty:** NFEnergía LLC, New Fortress Energy's Puerto Rico subsidiary
- **Supply:** NFEnergía LLC will supply natural gas to the plant from its micro fuel handling facility in the Port of San Juan, which is expected to be completed in mid-2019
- **Anticipated Savings:** By PREPA's estimates, the fuel savings could amount to ~\$150mm annually
  - The conversion to natural gas was anticipated by the IRP and thus fuel savings are reflected in the T&D P3 Project Financial Model and rate forecast
- **Timeline:** Expected completion of conversion by mid-2019

### Battery Storage (In Process – The Authority)

- Calls for development, installation and operation of \$300mm of utility-scale energy storage at critical substations
  - Envisions a battery energy storage system ("BESS") at Sabana Llana and Bayamon, with an optional 3<sup>rd</sup> facility at Humacao / Yabucoa
- In January 2019 four qualified proponents submitted bids:
  - Tesla
  - AES Puerto Rico LP / Fluence Energy LP
  - PowerSecure Inc.
  - Invenery Storage Development LLC
- Initially a proponent was expected to be selected by June 30, 2019, however, due to delays in FEMA funding processes, the bidding process is expected to be delayed





## NEAR-TERM GENERATION INITIATIVES AND PROCUREMENT (CONT'D)



TWO GENERATION PROCUREMENT PROCESSES INVOLVING EXISTING PREPA ASSETS ARE CURRENTLY IN PROGRESS VIA THE AUTHORITY.

### Flexible Distributed Peaking Generation (In Process)

- Calls for a single private party to own and operate new mobile and / or fixed (or a combination thereof) flexible distributed generation units with individual capacity in the range of 10 - 30 MW comprising ~450 MW pursuant to a 25-year power purchase and operating agreement ("PPOA") with PREPA
- These new dual fuel (natural gas and diesel) peaking units aim to replace PREPA's existing gas turbine fleet and will leverage the existing interconnection framework
  - The private party will design, permit, finance, and install the units
- The peaking units will be located at various locations (initially including at existing PREPA electric generation installations)
  - It is anticipated that certain of these units may eventually be relocated in order to meet capacity requirements of minigrids

### Hydroelectric Power Plant Revitalization (In Process)

- Calls for one or more private party(s) to rehabilitate, upgrade, manage and operate PREPA's hydroelectric generation facilities including the administration of any federal disaster funding
- The structure of the partnership contract will either be:
  - i. Long-term lease of facilities and a PPOA with PREPA
  - ii. Long-term operation and maintenance agreement
- PREPA will retain ownership of and title to the facilities
- System consists of 21 hydroelectric units at 11 sites with a combined capacity of ~100 MW
  - Procurement calls for private partner to raise generating capacity to 105 MW



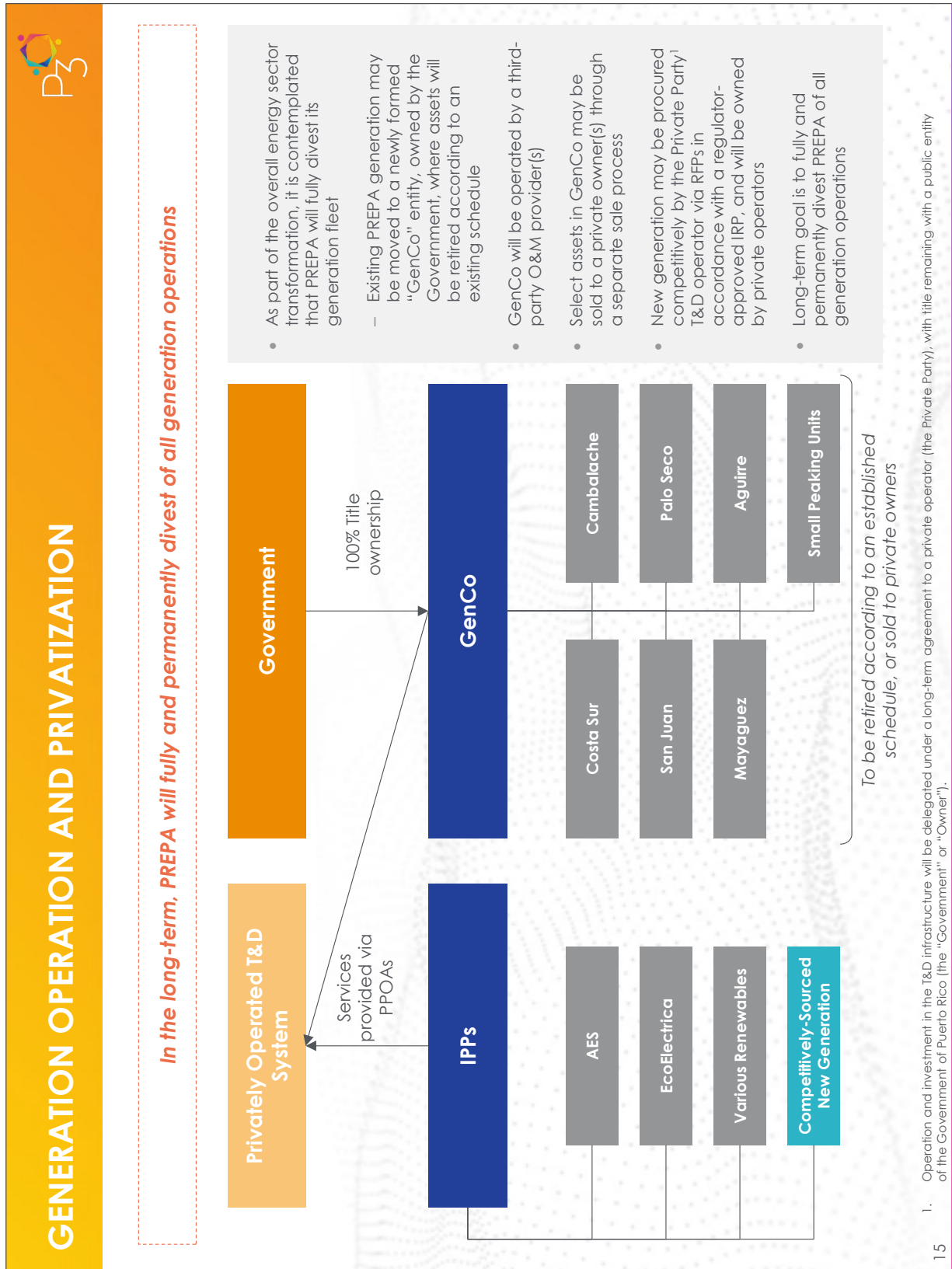






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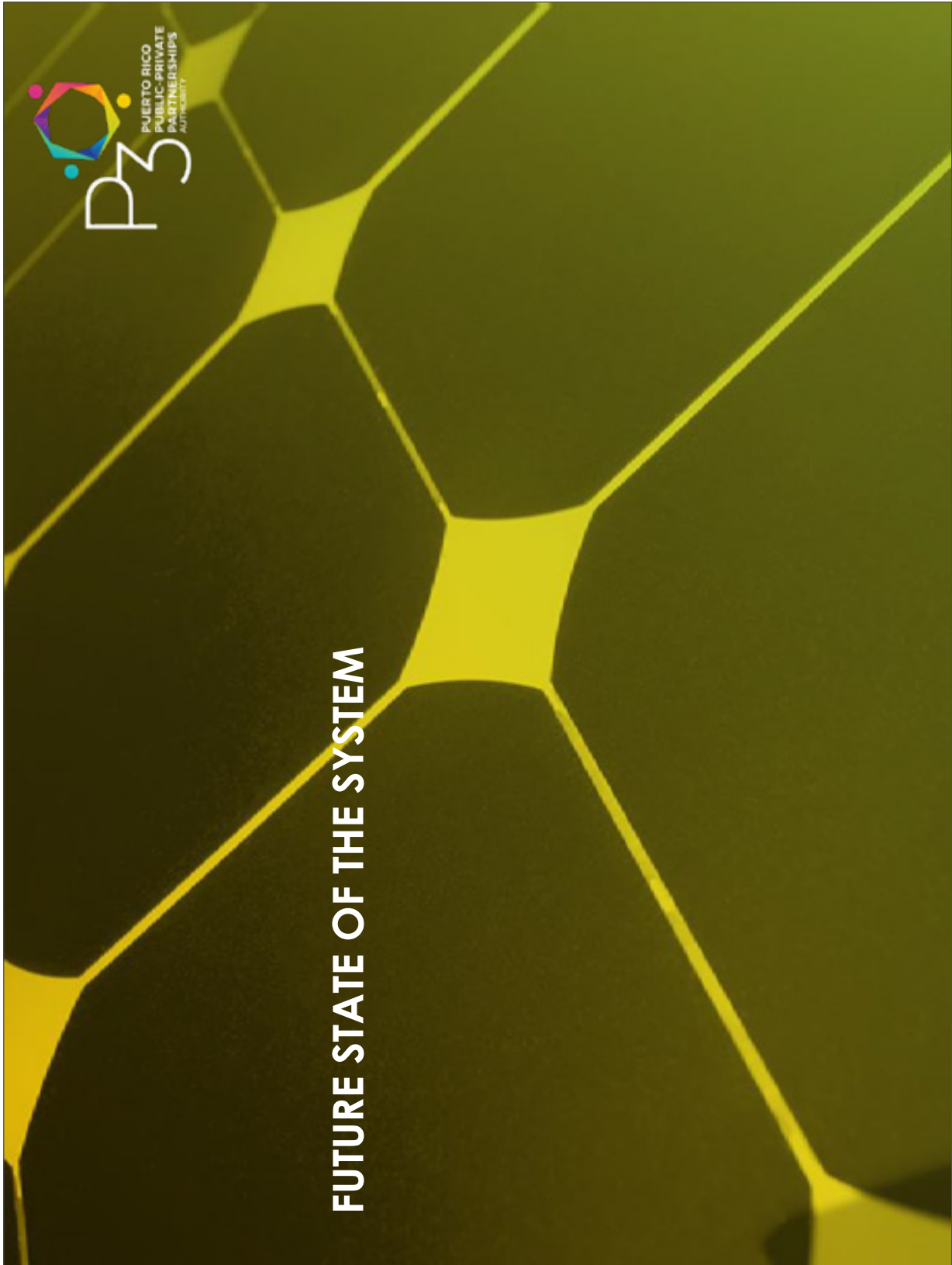






Exhibit E: PREPA Management Presentation

## TRANSMISSION INFRASTRUCTURE



Transmission Lines (Miles)					
230 kV		115 kV		38 kV	
Overhead	Underground	Overhead	Underground	Overhead	Underground
423	1	680	30	1,464	86
424		710		1,549	
Total 2,684					
15 Line Segments		11 Line Segments		241 Line Segments	
Transmission Centers and Substations					
Privately-Owned		Substation: 115 kV		Substation: 38 kV	
824		61		279	
Distribution Feeders					
13,366 Overhead miles 3,440 Underground miles		~1,200			





Exhibit E: PREPA Management Presentation

## CHARACTERISTICS OF THE SYSTEM

- Electric island
- Traditional Design
  - Great amount of generation on a few power plants
  - Generation, transmission and distribution
  - Extensive use of 38 kV as sub-transmission
  - Multiple voltages at radial distribution; 4.16 kV to 13.2 kV
- **60%** of load in north part of the island (San Juan, Bayamon, Arecibo, Carolina)
- **66%** of the generation in the south part of the island
  - Cheapest Generation
  - Coal and Gas fired generation
- Highly dependent of transmission lines
  - Vegetation management





## CHARACTERISTICS OF THE SYSTEM (CONT'D)

- Under regular operations there is heavy use of the north-south transmission lines that traverse difficult terrain
- Loss of one line (e.g. Aguirre Aguas Buenas) requires redispach of generation increasing reserves in the north

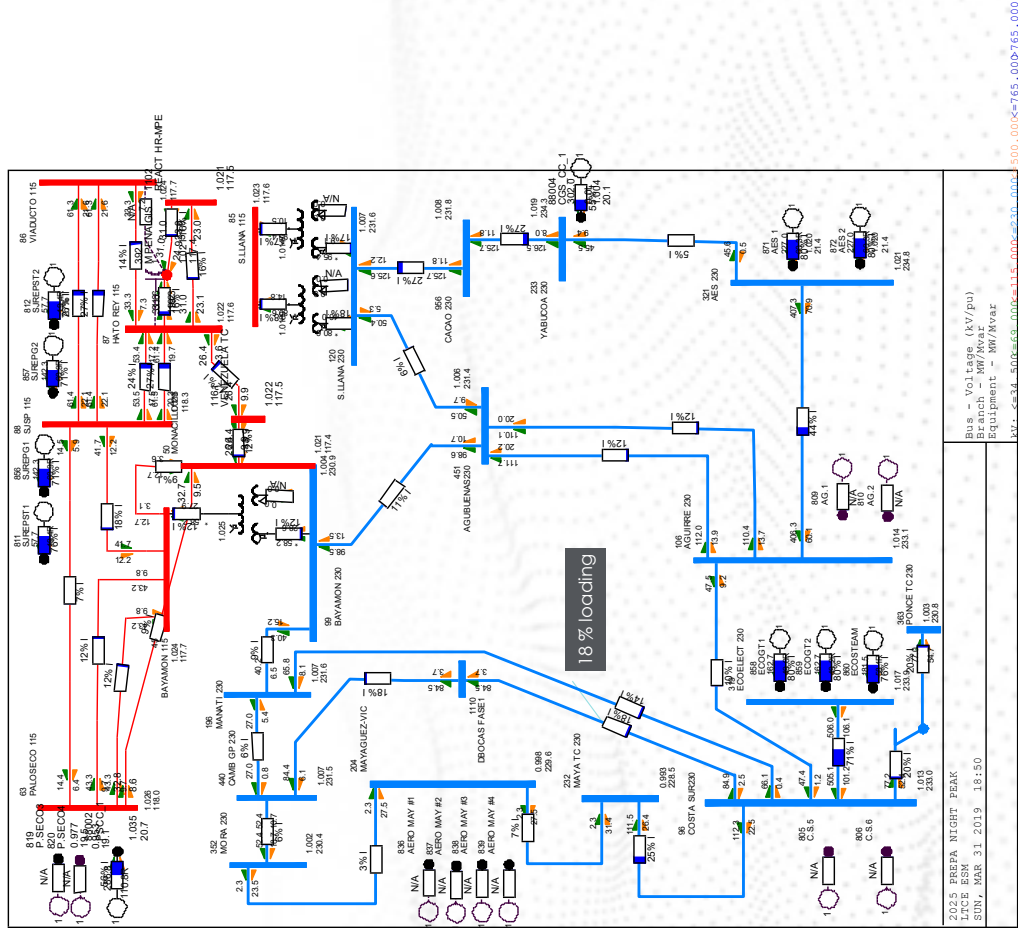






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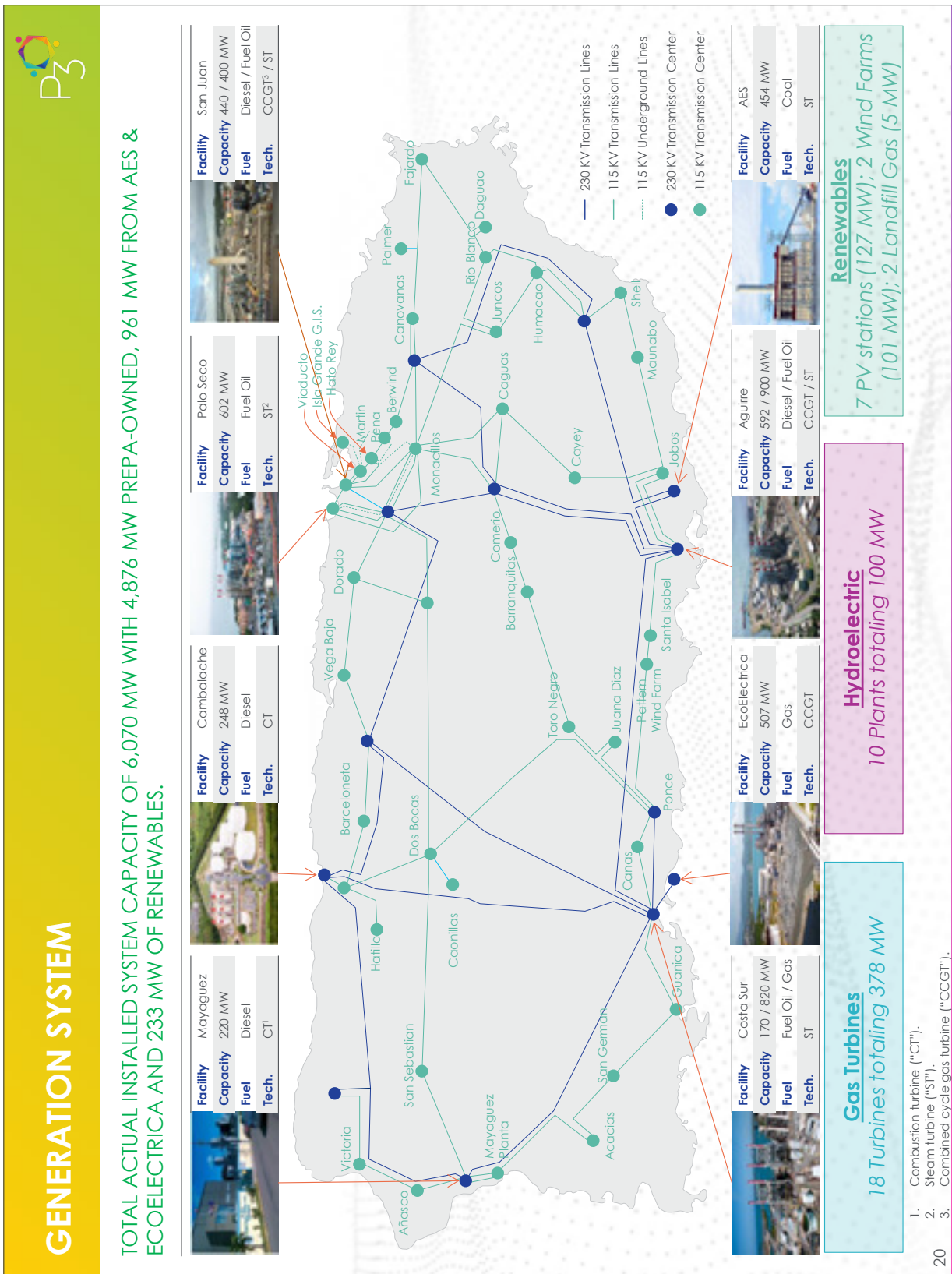






Exhibit E: PREPA Management Presentation

## PREPA'S INTEGRATED RESOURCE PLAN TARGETS



- **Resiliency:** The system has to be resilient and capable to prepare, manage and quickly recover from extreme weather events such as Hurricane Maria
- **Financially Viable:** Minimize the cost of supply and drastically reduce the dependence on imported fuels and the associated volatility
- **Sustainable:** Transition from a system reliant on fossil fuels to one in which renewable resources play a central, if not, the predominant role; environmental stewardship
- **Customer-Centric:** Customer participation via energy efficiency, customer-side energy resources (distributed generation) and demand response have a predominant role in the supply and consumption matrix of Puerto Rico
  - Customers are empowered to participate and take ownership on their energy security and affordability
- **Economic Growth Engine:** Promote and support the economy of Puerto Rico. Encourages participation of customers and third parties





## Exhibit E: PREPA Management Presentation

# INTEGRATED RESOURCE PLAN PROCESS OVERVIEW

**SUBJECT TO  
REVISION BY  
PREB<sup>1</sup> ORDER**

PREPA FILED ITS IRP ON FEBRUARY 13, DETAILING ITS VIEW OF FUTURE RESOURCES.

## IRP Overview

- PREPA, with the support of Siemens, developed a series of long-term capacity expansion ("LTCE") plans based on multiple scenarios regarding access to new natural gas and renewables resources
- Each scenario is run at various load sensitivities, as well as three strategies for grid design:
  - Strategy One:** System is fully centralized, with no limitations on resource location
  - Strategy Two:** System is highly distributed, with at least 80% of peak demand covered by localized capacity
  - Strategy Three:** System is moderately distributed, with at least 50% of peak demand covered by localized capacity
- The IRP approval process will run concurrently with the transformation

## Scenario Sensitivities

Sensitivity	Solar / BESS		Energy Efficiency	PPOAs	Gas	
	Low Cost	High Cost	Low Energy Efficiency	Economic Retirement of AES and EcoElectrica	Ship-based LNG at San Juan	High Gas Prices
1	✓					
2			✓			
3				✓		
4					✓	
5						✓
6		✓				

## Scenarios Considered

Scenario	Description	Liquefied Natural Gas ("LNG") Import			Renewables & Storage		
		Includes the Aguirre Offshore Gas Port	Includes Land-Based LNG at San Juan	Includes Ship-Based LNG at Yabucoa	Includes Ship-Based LNG at Mayaguez	Costs	Availability
Scenario 1	No new natural gas with base case cost of renewables and availability	✗	✗	✗	✗	Reference Case	Reference Case
Scenario 2	Gas delivery in only the north with base case cost of renewables and availability	✗	✓	✗	✗	Reference Case	Reference Case
Scenario 3	New LNG terminals, reduced renewables cost, and increase in renewables availability	✗	✓	✓	✓	Low Case	High Case
Scenario 4	New LNG terminals with base case cost of renewables and availability	✗	✓	✓	✓	Reference Case	Reference Case
Scenario 5	Similar to Scenario 4, but with Aguirre Offshore Gas Port and large combined cycle ("CC") units	✓	✓	✓	✓	Reference Case	Reference Case
ESM Scenario <sup>2</sup>	Similar to Scenario 4, but incorporates ongoing PREPA projects and processes	✗	✓	✓	✓	Reference Case	Reference Case

Source: IRP.

- Puerto Rico Energy Bureau ("PREB").
- Energy System Modernization Plan ("ESM"). The ESM plan incorporates fixed decisions made independent of the LTCE analysis.

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Exhibit E: PREPA Management Presentation

## INTEGRATED RESOURCE PLAN PROCESS UPDATE



ON MARCH 14, PREB ISSUED AN ORDER THAT PREPA'S IRP WAS NOT IN COMPLIANCE. ON MARCH 26, PREPA FILED CLARIFYING QUESTIONS AND ASKED THAT A REVISED SCHEDULE BE DETERMINED FOLLOWING PREB'S RESPONSE.

- On March 14, 2019, PREB issued an order determining that PREPA's IRP is not in compliance with the IRP regulation and prior PREB orders
  - PREB determined that the IRP is not in compliance with completeness requirements nor numerous PREB orders issued in relation to the IRP
  - Deficiencies identified by PREB include, but are not limited to, the use of "fixed decision" determinations, additional sensitivities for LNG infrastructure, and additional parameters for early renewable development
  - PREB provided instructions to PREPA regarding the items required for filing a complete IRP
- As a result, PREB directed PREPA to re-file its proposed IRP and correct the specified deficiencies by April 13, 2019
- On March 26, 2019, PREPA submitted a list of clarification questions to PREB
  - In addition, PREPA filed a motion to extend the re-filing deadline pending answers from PREB to its clarification questions (deadline to be determined ("TBD")), but to be no earlier than 35 days from receipt of the answers)
- PREPA continues to analyze the PREB determination and intends to make the requisite updates in order to re-file the IRP

Source: PREB.





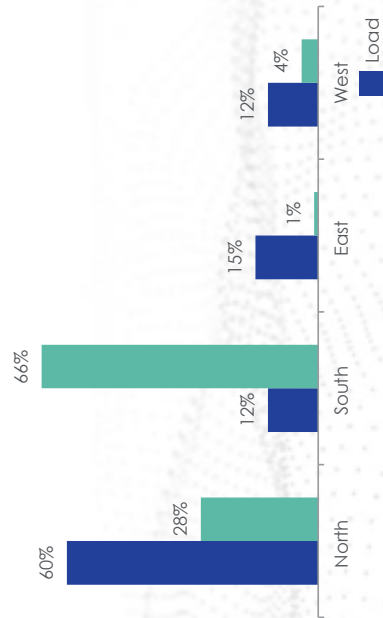
Exhibit E: PREPA Management Presentation

## FUTURE SYSTEM

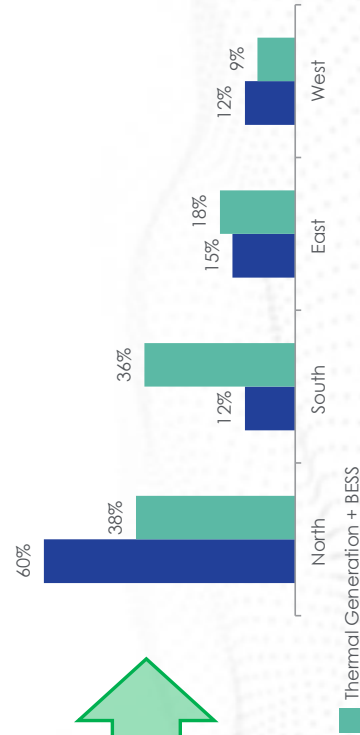
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WITH THE RETIREMENT OF EXISTING GENERATION AND ENTRY OF NEW THERMAL, PV AND STORAGE (BESS) THERE WILL BE A MUCH BETTER BALANCE OF GENERATION AND DEMAND.

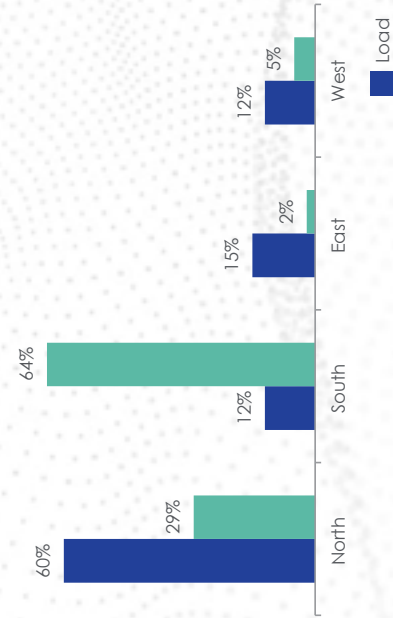
### 2019 Night Peak Situation



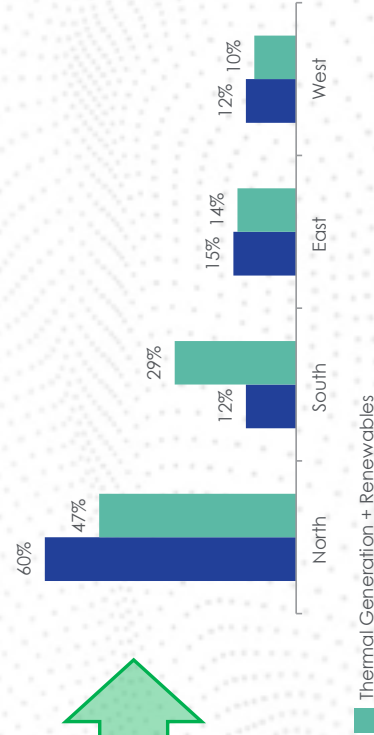
### 2026 Night Peak Situation



### 2019 Day Peak Situation



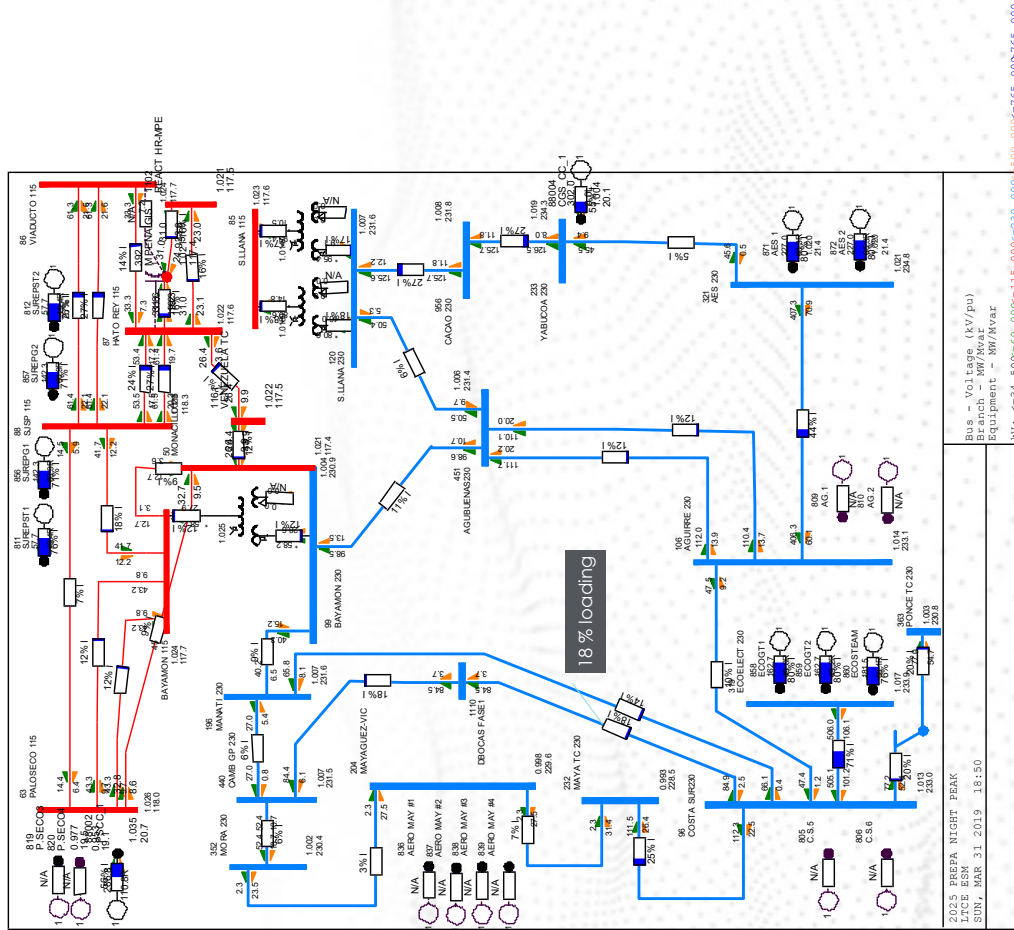
### 2026 Day Peak Situation





# CHARACTERISTICS OF THE FUTURE SYSTEM

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- Under regular operations there is light use of the transmission lines that traverse difficult terrain
- Loss of one line (e.g. Aguirre Aguas Buenas) does not require significant changes to the dispatch
  - Vegetation management is less critical





## THE FUTURE SYSTEM – RENEWABLE PENETRATION

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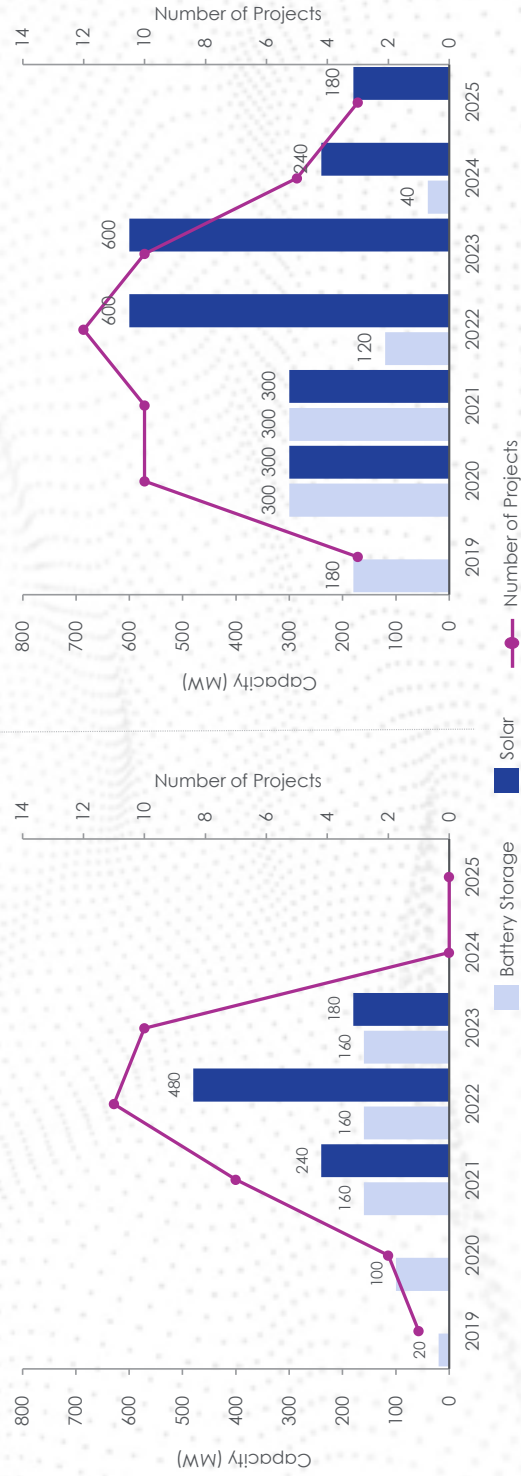


### THE FUTURE SYSTEM CONTEMPLATES HIGH LEVELS OF RENEWABLE GENERATION AND STORAGE.

- Greater rate stability due to reduction on fuel costs
- Low inertia and high variability of renewables – mostly photovoltaic – generation
- Critical role for storage in providing frequency control and load following to complement flexible thermal generation
- Low short-circuit level and changing over the time of the day. Synchronous condensers become necessary
- Smaller size of resources resulting in large number of interconnection processes in parallel particularly in the first years of the plan that must be managed

#### ESM

#### Scenario 4 Strategy 2







## THE FUTURE SYSTEM – DISTRIBUTED GENERATION

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DISTRIBUTED GENERATION CLOSER TO THE CUSTOMER WITH HIGH PARTICIPATION OF CUSTOMER-OWNED GENERATION AT THE FEEDER LEVEL.

- Over 30% of the projected solar generation on the 50% ESM plan is projected to be customer owned
- Customer-owned PV is projected to increase from approximately 200 MW by the end of 2019 to over a 1,000 MW by 2038
- The feeder system will be the key integrator and requires important investments in voltage regulation, local reinforcements and protection
- Reverse flows into transmission are expected to be prevalent during mid day particularly on residential feeders

### Distributed Generation (MW)



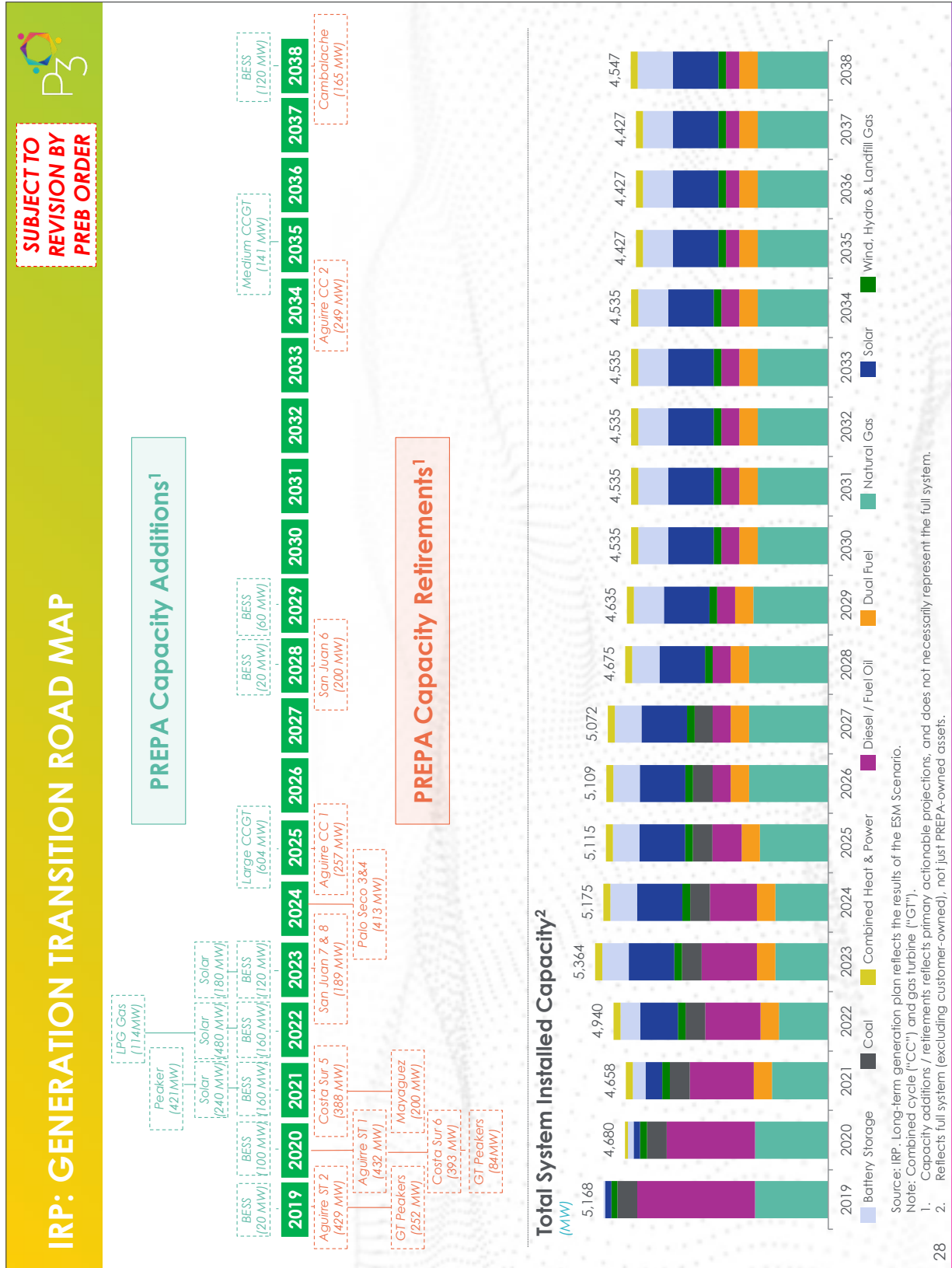
### Feeder Screening Results (Number of Feeders)

Min Nominal Voltage kV	Voltage Issues Possible	Overload Issues Possible	Reverse Flow Possible
4.16	21	10	23
7.2	1	1	0
8.32	4	1	4
13.2	9	1	8





Exhibit E: PREPA Management Presentation



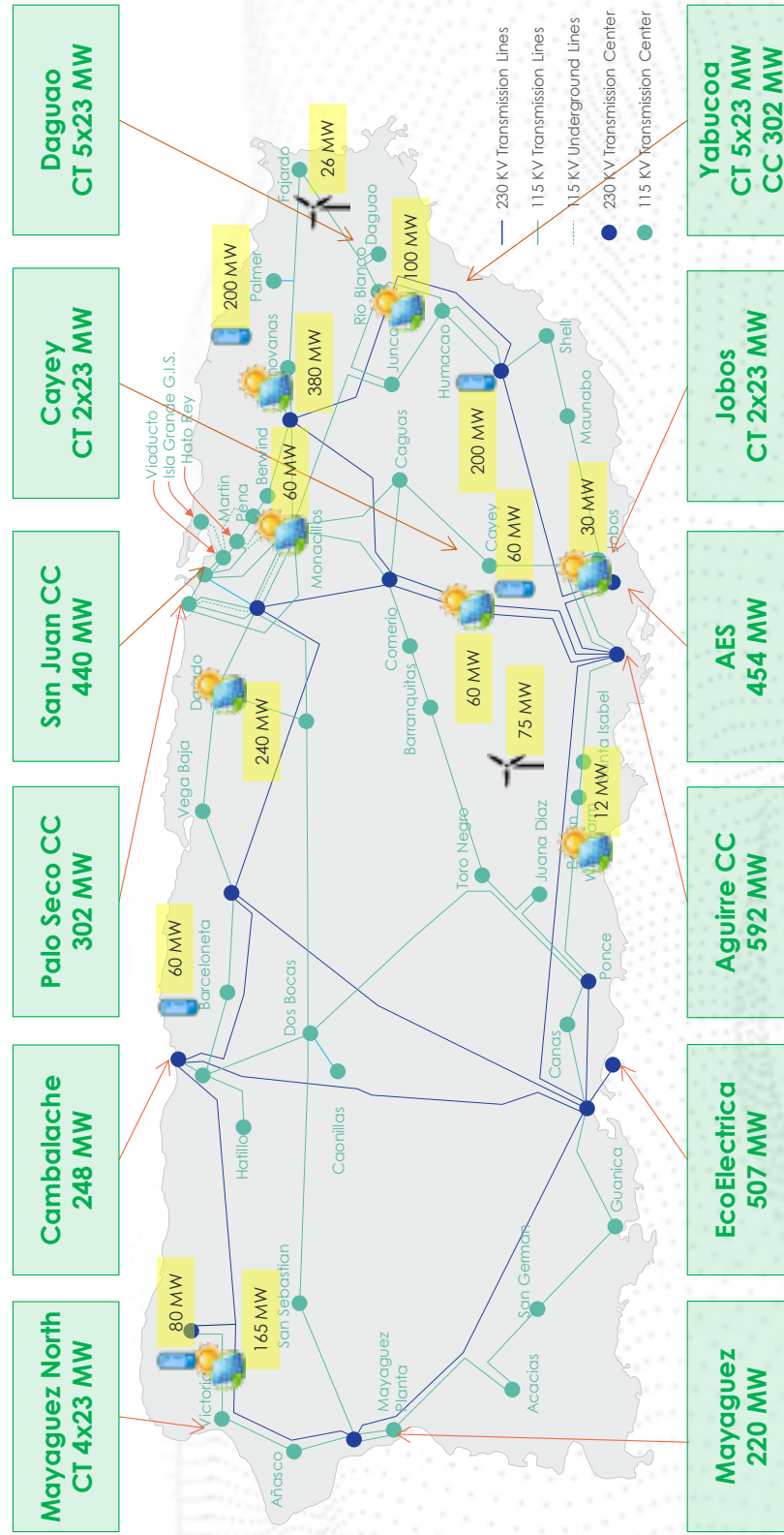


**Exhibit E: PREPA Management Presentation**

# THE FUTURE SYSTEM – GENERATION

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THE BELOW REPRESENTS THE SYSTEM'S GENERATION STATE IN 2025, PER THE ESM PLAN.



Source: IRP.





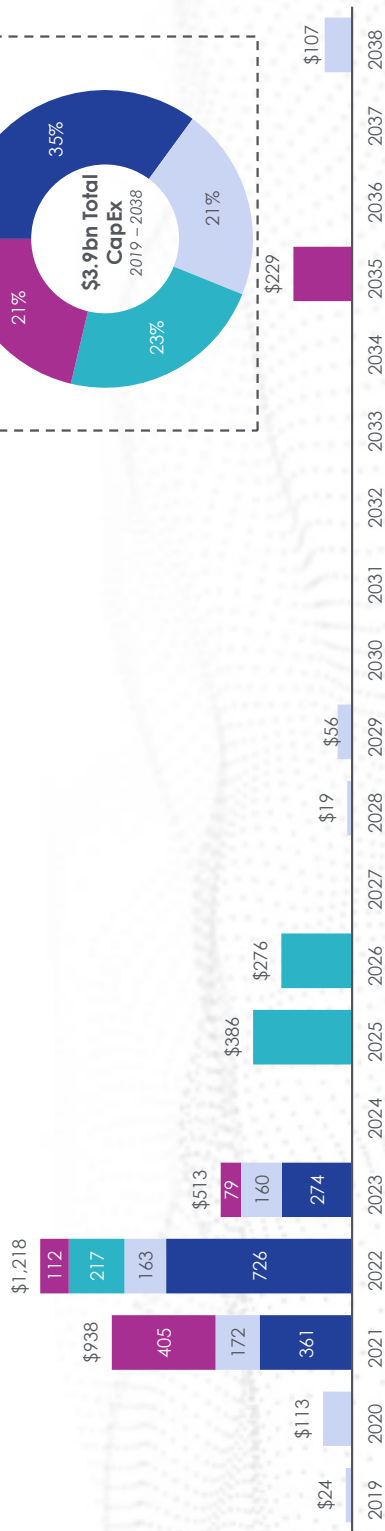
## GENERATION BUILDOUT CAPEX FORECAST

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\$3.9BN IN TOTAL NEW GENERATION CAPEX MAY BE NEEDED TO MODERNIZE THE GENERATION FLEET, INCLUDING THE EXPANSION OF RENEWABLES, BATTERY STORAGE, AND EFFICIENT GAS-FIRED FACILITIES.

### Annual New Generation CapEx Forecast (\$ in millions)



#### Utility Solar PV (\$1.3bn)

- Reflects development of 900 MW of utility-scale solar PV from 2021 - 2023
- Real dollar construction costs decline at a ~2% year-over-year CAGR, for a total ~18% cost decrease from 2019 - 2028

#### Battery Storage (\$0.7bn)

- Reflects development of 800 MW of battery storage systems from 2019 - 2038
  - 40 MW of 2-hour Li-ion storage
  - 760 MW of 4-hour Li-ion storage
- Real dollar construction costs decline at a ~5% year-over-year CAGR, for a total ~34% cost decrease from 2019 - 2028

#### Large & Small CCGT (\$0.9bn)

- Reflects development of 604 MW of large natural gas-fired CCGT units and a 114 MW small LPG-fired CCGT from 2022 - 2025
- Assumes gas-fired units are a GE F.04 Class CC with duct-firing capabilities; LPG-fired unit is a GE LM2500+G4 SAC
- Real dollar construction costs are constant over the forecast period

#### Peakers (\$1.0bn)

- Reflects development of 421 MW of simple cycle units in 2021 and a 141 medium diesel CCGT in 2035
- Assumes simple cycle units have P&W FT8 MOBILEPAC 25 DLN turbine-generators or GE LM2500 SAC turbine-generators; medium diesel CCGT is a Hitachi H-100
- Real dollar construction costs are constant over the forecast period

Note: The Financial Model does not reflect the updated capex figures.  
Source: The ESM Scenario of PREPA's IRP.





## Exhibit E: PREPA Management Presentation

## IRP: ACTION PLAN

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THE IRP HAS IDENTIFIED KEY ACTION ITEMS THAT PREPA SHOULD UNDERTAKE IN THE NEAR-TERM IN ORDER TO IMPLEMENT THE PREFERRED PLAN BY THE IRP. THESE ITEMS COULD BE DESCRIBED AS “NO-REGRETS” ACTIONS.

Key Near-Term Supply Resource Action Items		Estimated CapEx
Modification of Existing Resources	Conversion of San Juan 5 & 6 from diesel to natural gas by 2019 (2 x 200 MW)	NA <sup>1</sup>
	Conversion of Mayaguez 1-4 from diesel to natural gas by 2022 (4 x 50 MW), supported by ship-based LNG	\$5mm
Installation of New Resources	EcoElectrica contract renegotiation and extension	NA
	San Juan generator conversion to synchronous condensers for PV solar integration	\$9mm per unit
	Installation of 900 MW – 1,800 MW of solar PV from 2020 – 2023	\$1.3bn - \$2.6bn
	Installation of 600 MW – 900 MW of battery energy storage from 2019 – 2023	\$0.6bn - \$1.0bn
	Palo Seco CCGT (302 MW F-Class) new build by 2025, supported by land-based LNG	\$291mm
	Costa Sur CCGT (302 MW F-Class) new build by 2025, if EcoElectrica contract renegotiation is unsuccessful	\$291mm
	Yabucoa CCGT (302 MW F-Class) new build by 2025, supported by ship-based LNG	\$291mm
	Mayaguez CCGT (302 MW F-Class) new build by 2025, supported by ship-based LNG, only if new Yabucoa CCGT is not built	\$291mm
	San Juan small LNG or LPG CCGT (3 x 38 MW) as an option against delays / early failure of other units, supported by ship-based LNG, with LPG as an option	\$203mm
	Mobile gas turbine peaking units (18 x 23 MW) – 2 units in Jobos – 4 units in Mayaguez North – 5 units in Carolina (Daguao) – 5 units in Caguas (Yabucoa) – 2 units in Cayey	\$384mm
New Natural Gas Infra.	San Juan land-based LNG terminal, to supply large quantities of natural gas to San Juan and Palo Seco	\$492mm
Retirements	Yabucoa ship-based LNG terminal	\$215mm
	Mayaguez ship-based LNG terminal	\$215mm
Existing Unit	Retire the Frame 5 peakers from 2019 – 2021 (378 MW)	NA
	Retire Aguirre ST 1 in 2019 (450 MW)	
	Retire Aguirre ST 2 in 2020 (450 MW)	
	Retire Costa Sur 6 in 2020 (410 MW)	
	Retire Costa Sur 5 in 2021 (410 MW)	
	Retire San Juan 7 & 8 in 2023 (200 MW)	
	Retire Palo Seco 3 & 4 in 2024 (432 MW)	
	Retire Aguirre CC 1 in 2025 (296 MW)	

Source: IRP.

1. There is no estimated capex for this conversion as the contract for the conversion was structured as a capacity payment within the fuel contract.

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## THE FUTURE SYSTEM - MINIGRIDS

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IN AN EFFORT TO INCREASE THE RESILIENCY OF THE GRID, THE SYSTEM WILL BE ORGANIZED INTO INDEPENDENT ELECTRICAL "ISLANDS" WHICH THE SYSTEM CAN BE DIVIDED INTO FOLLOWING A CATASTROPHIC EVENT.

### Minigrid and Microgrid Overview

- Network of independent minigrids will be designed to prevent system-wide blackouts if key transmission lines fail, which occurred following Hurricane Maria
- 8 minigrids have been identified considering the vulnerability of the transmission system and the practical possibilities to reinforce it
  - Interconnecting lines may take more than a month to repair potential damage after a hurricane were explicitly excluded from the minigrid
- Minigrids are designed to supply critical loads such as hospitals, police stations, fire departments, and communications during the event
  - Rely on thermal generation and underground facilities during the event and shortly after
- Within each minigrid, small-scale microgrids identified are for those load centers that cannot be effectively connected back to the minigrid
- Each minigrid normally operates economically by interconnection with the rest of the electric power system, but can operate independently in the event of grid failure
- Builds an additional layer of resiliency and hardening for key operation centers

### Geographic Location of Minigrids







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## THE FUTURE SYSTEM – MINIGRIDS (CONT'D)

EACH MINIGRID IS TO HAVE SUFFICIENT LOCAL GENERATION TO COVER THE LOAD AND OPERATE INDEPENDENTLY AFTER A CATASTROPHIC EVENT. CRITICAL LOADS SUPPORTED BY THE MICROGRIDS WILL BE SERVED BY THERMAL RESOURCES .

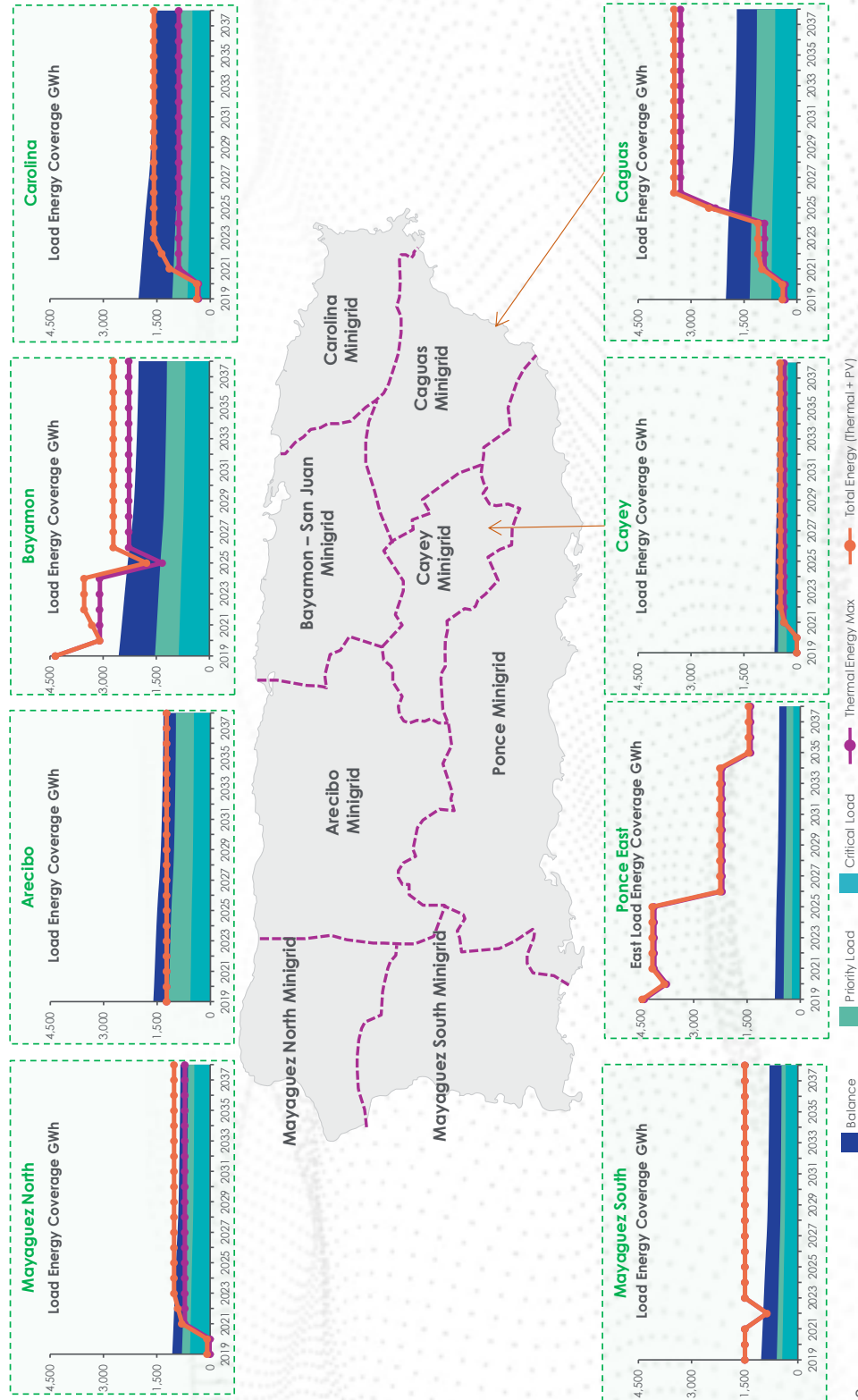




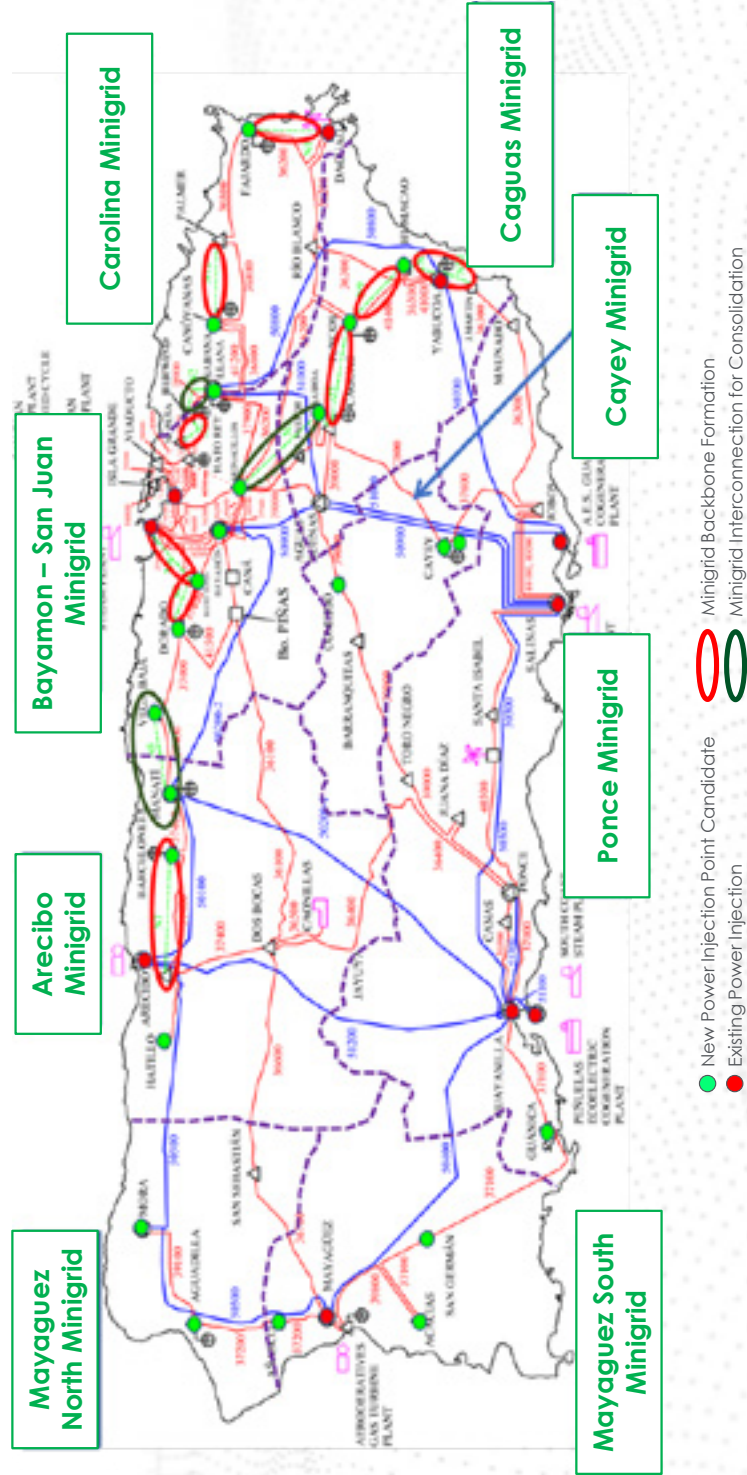


Exhibit E: PREPA Management Presentation

## THE FUTURE SYSTEM – T&D

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EACH MINIGRID TRANSMISSION SYSTEM WILL BE REINFORCED CREATING A BACKBONE AND PROVIDING CONNECTION OF CRITICAL LOADS TO THE BACKBONE.

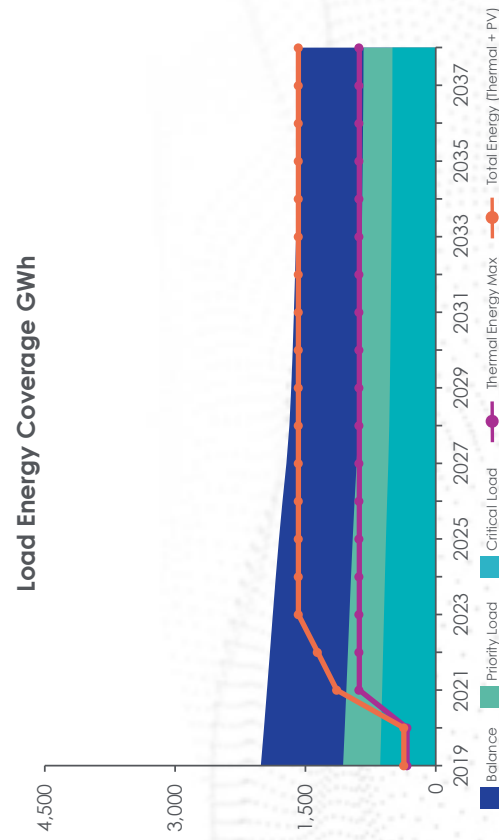




**FUTURE SYSTEM – CAROLINA MINIGRID**

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\$484MM IN TRANSMISSION INVESTMENTS FOR THE CAROLINA MINIGRID. IT IS ANTICIPATED THAT CRITICAL LOADS WILL BE COVERED AFTER 2021 (WHEN NEW GENERATION GAS TURBINES COME ONLINE).



**There are a total of 3 microgrids in Carolina**

## Minigrid Investment Costs (\$mm)

Total Investments		Cost
115 kV	\$294.7	
38 kV	189.0	
Minigrid Controller	0.7	
Total		\$484.3

115 kV Investments		Cost
Existing Infrastructure Hardening for Reliability		\$0.0
Interconnection of Minigrids		0.0
Minigrid Backbone Extensions to Create High Reliability / Resiliency Zones		0.0
Minigrid Main Backbone		294.7
Total		\$294.7

38 kV Investments		Cost
Interconnection of Critical Loads		\$159.4
Interconnection of Minigrids		0.0
Existing Infrastructure Hardening for Reliability		0.0
Minigrid Backbone Extensions to Create High Reliability / Resiliency		29.6
Minigrid Main Backbone		0.0
Total		\$189.0





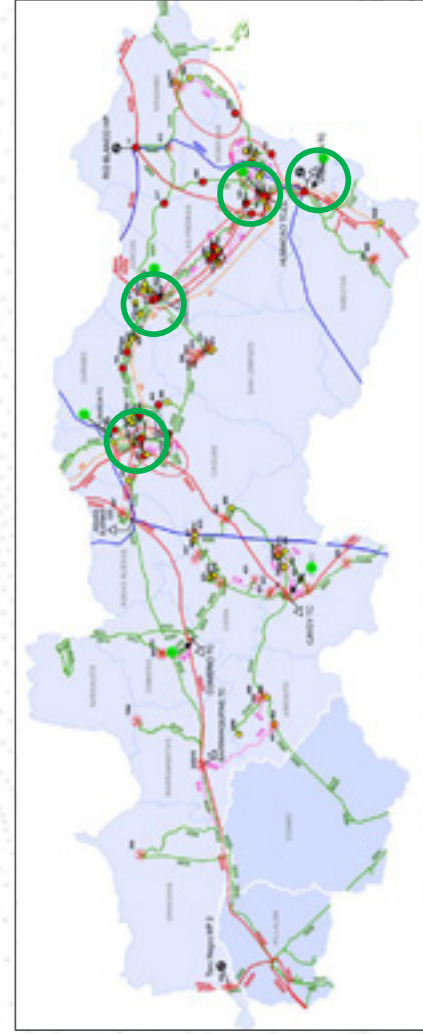
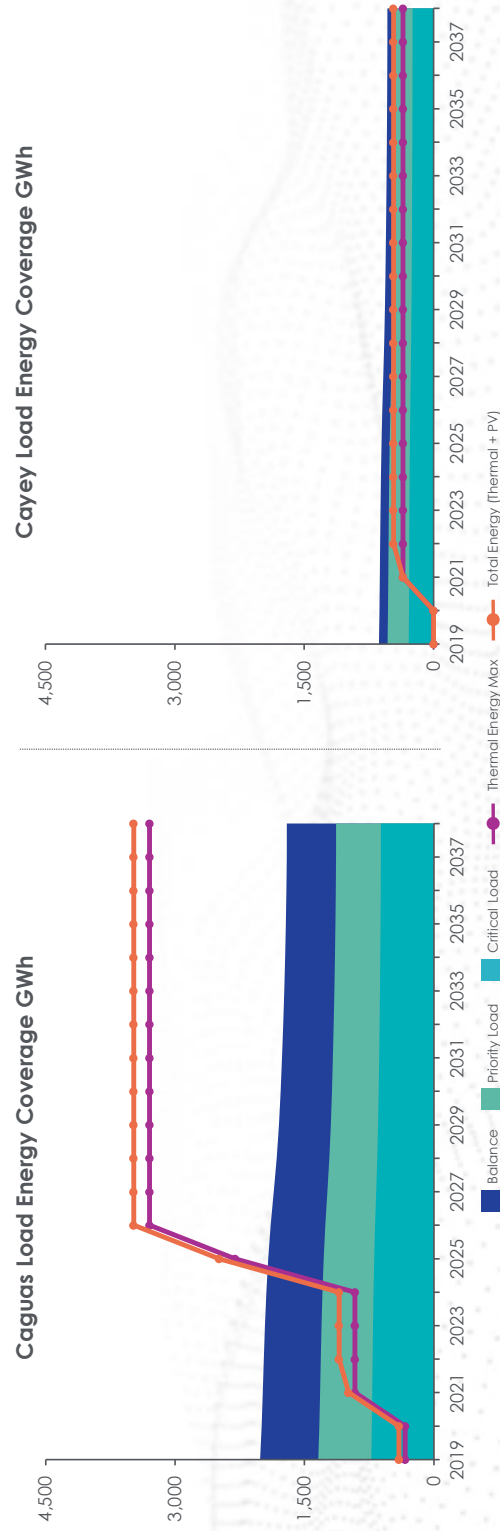
Exhibit E: PREPA Management Presentation

## FUTURE SYSTEM – CAGUAS & CAYEY MINIGRIDS

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\$752MM IN TRANSMISSION INVESTMENTS FOR THE CAGUAS & CAYEY MINIGRIDS. IT IS ANTICIPATED THAT CRITICAL LOADS WILL BE COVERED AFTER 2021 (WHEN NEW GENERATION GAS TURBINES COME ONLINE).



**9 microgrids  
projected for the  
area due to  
geography**

Generation Location





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## FUTURE SYSTEM – CAGUAS & CAYEY MINIGRIDS (CONT'D)

\$752MM IN TRANSMISSION INVESTMENTS FOR THE CAGUAS & CAYEY MINIGRIDS.

### Minigrid Investment Costs (\$mm)

Total Investments	Cost	115 kV Investments	Cost	38 kV Investments	Cost
115 kV	\$389.2	Existing Infrastructure Hardening for Reliability	\$0.0	Interconnection of Critical Loads	\$289.4
38 kV	362.4	Interconnection of Minigrids	17.2	Interconnection of Minigrids	55.3
Minigrid Controller	0.4	Minigrid Backbone Extensions to Create High Reliability / Resiliency Zones	0.0	Existing Infrastructure Hardening for Reliability	0.0
<b>Total</b>	<b>\$752.0</b>	Minigrid Backbone Extensions to Create High Reliability / Resiliency	372.0	Minigrid Backbone Extensions to Create High Reliability / Resiliency	2.6
		Minigrid Main Backbone		Minigrid Main Backbone	15.1
		<b>Total</b>	<b>\$389.2</b>	<b>Total</b>	<b>\$362.4</b>

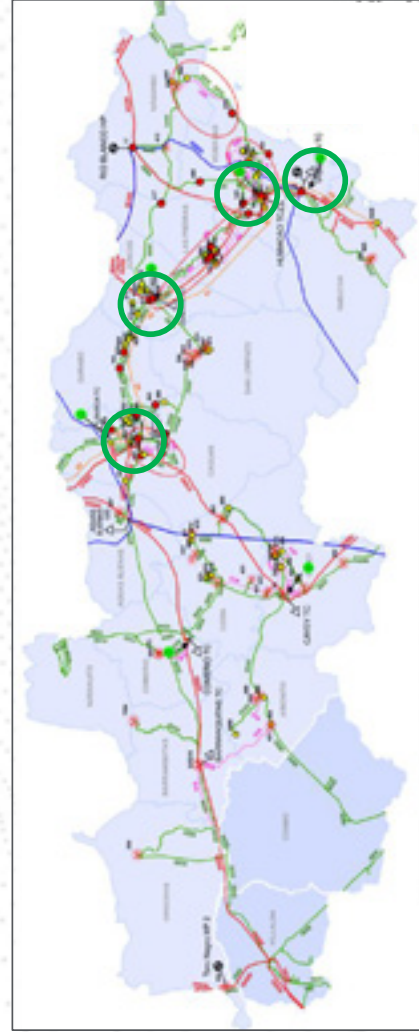






Exhibit E: PREPA Management Presentation

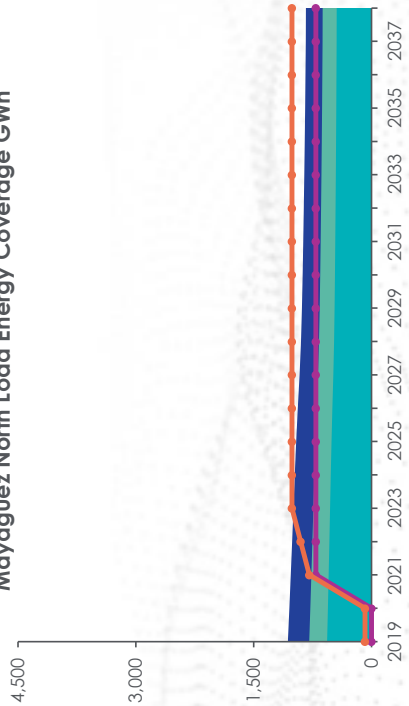
## FUTURE SYSTEM – MAYAGUEZ NORTH & SOUTH MINIGRIDS

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PREB ORDER**

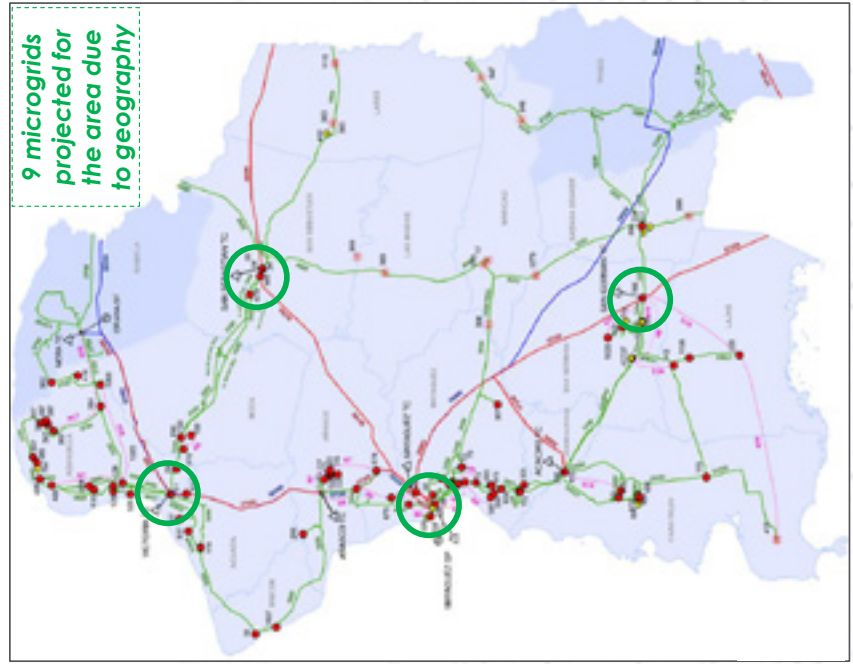
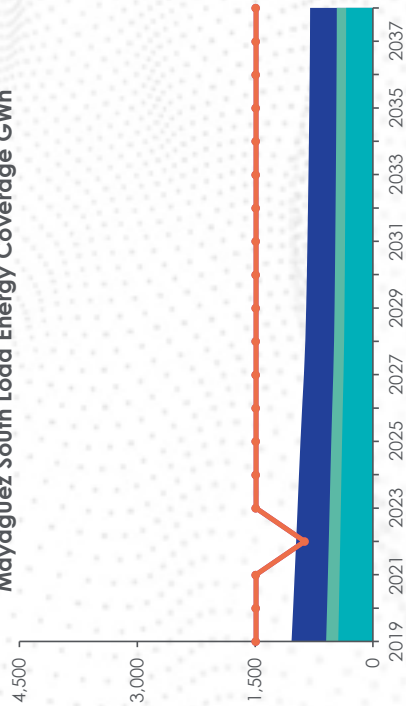


\$617MM IN TRANSMISSION INVESTMENTS FOR THE MAYAGUEZ NORTH AND SOUTH MINIGRIDS. IT IS ANTICIPATED THAT CRITICAL LOADS IN THE NORTH WILL BE COVERED AFTER 2021, WHILE THE SOUTH IS ALREADY COVERED.

Mayaguez North Load Energy Coverage GWh



Mayaguez South Load Energy Coverage GWh



Generation Location





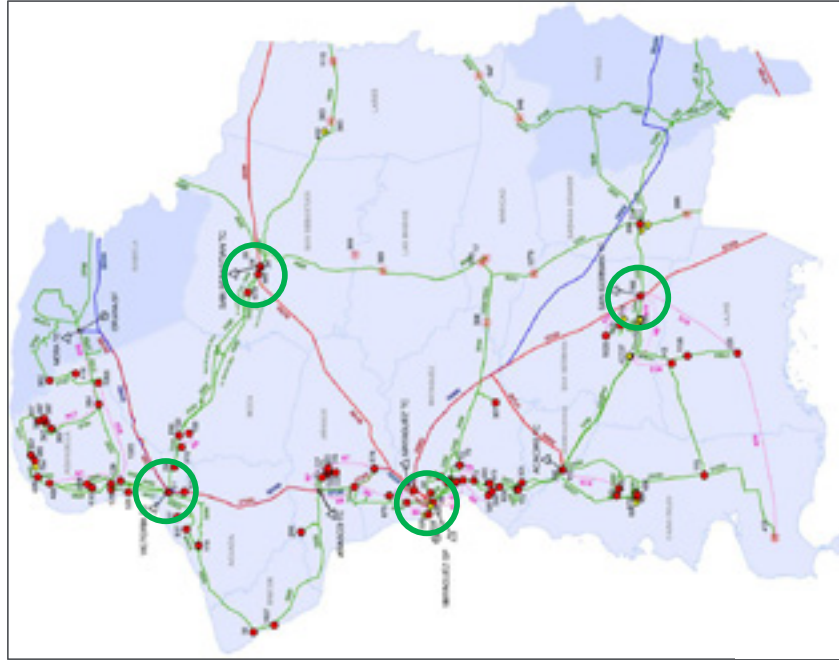
## FUTURE SYSTEM – MAYAGUEZ MINIGRIDS (CONT'D)



\$617MM IN TRANSMISSION INVESTMENTS FOR THE MAYAGUEZ NORTH AND SOUTH MINIGRIDS.

### Minigrid Investment Costs (\$mm)

Total Investments	Cost
115 kV	\$229.0
38 kV	386.9
Minigrid Controller	0.8
<b>Total</b>	<b>\$616.7</b>
115 kV Investments	Cost
Existing Infrastructure Hardening for Reliability	\$0.0
Interconnection of Minigrids	0.0
Minigrid Backbone Extensions to Create High Reliability / Resiliency Zones	0.0
Minigrid Main Backbone	229.0
<b>Total</b>	<b>\$229.0</b>
38 kV Investments	Cost
Interconnection of Critical Loads	\$347.7
Interconnection of Minigrids	0.0
Existing Infrastructure Hardening for Reliability	25.5
Minigrid Backbone Extensions to Create High Reliability / Resiliency	0.0
Minigrid Main Backbone	13.6
<b>Total</b>	<b>\$386.9</b>



Generation Location





Exhibit E: PREPA Management Presentation

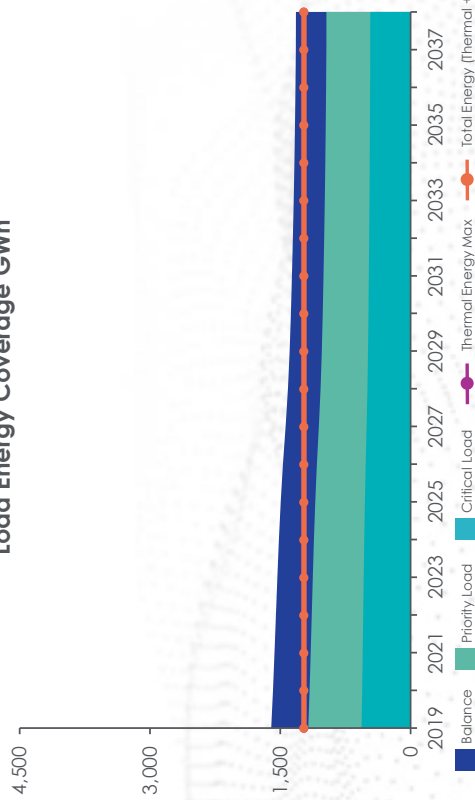
## FUTURE SYSTEM – ARECIBO MINIGRID

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PREB ORDER**

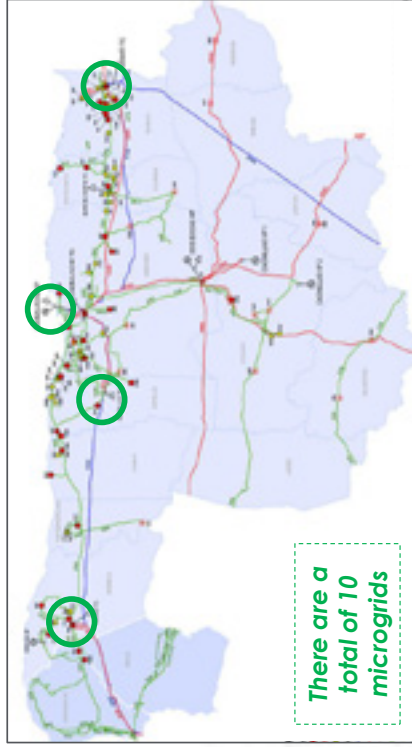


\$549MM IN TRANSMISSION INVESTMENTS FOR THE ARECIBO MINIGRID. CRITICAL LOADS ARE ALREADY COVERED BY CAMBALACHE.

Load Energy Coverage GWh



There are a  
total of 10  
microgrids



Generation  
Location

### Minigrid Investment Costs (\$mm)

Total Investments		Cost	115 kV Investments		Cost	38 kV Investments		Cost
115 kV		\$295.7	Existing Infrastructure Hardening for Reliability		\$24.3	Interconnection of Critical Loads		\$240.5
38 kV		252.7	Interconnection of Minigrids		0.0	Interconnection of Minigrids		0.0
Minigrid Controller		0.7	Minigrid Backbone Extensions to Create High Reliability / Resiliency Zones		0.0	Existing Infrastructure Hardening for Reliability		0.0
<b>Total</b>		<b>\$549.1</b>	Minigrid Main Backbone		271.4	Minigrid Backbone Extensions to Create High Reliability / Resiliency		5.3
			<b>Total</b>		<b>\$295.7</b>	Minigrid Main Backbone		6.9
						<b>Total</b>		<b>\$252.7</b>

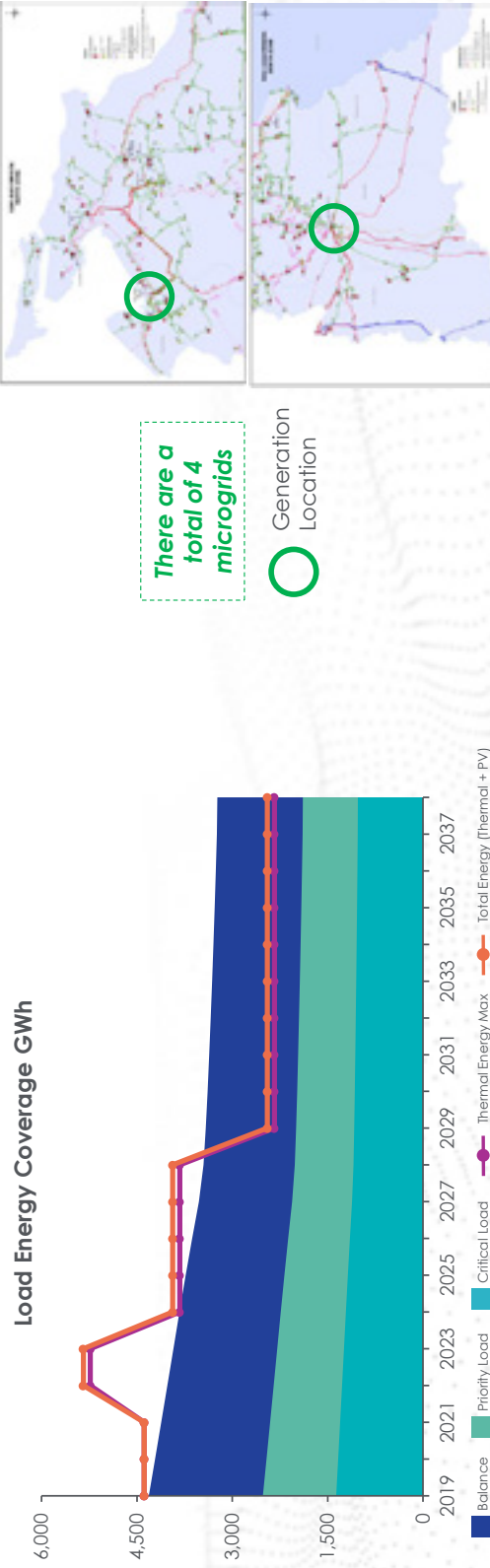




## FUTURE SYSTEM – SAN JUAN MINIGRID

**SUBJECT TO  
REVISION BY  
PREB ORDER**

\$736MM IN TRANSMISSION INVESTMENTS FOR THE SAN JUAN MINIGRID. CRITICAL LOADS ARE ALREADY COVERED.



### Minigrid Investment Costs (\$mm)

Total Investments	Cost	115 kV Investments	Cost	38 kV Investments	Cost
115 kV	\$392.5	Existing Infrastructure Hardening for Reliability	\$0.0	Interconnection of Critical Loads	\$241.7
38 kV	342.5	Interconnection of Minigrids	0.0	Interconnection of Minigrids	100.8
Minigrid Controller	0.8	Minigrid Backbone Extensions to Create High Reliability / Resiliency Zones	70.4	Existing Infrastructure Hardening for Reliability	0.0
<b>Total</b>	<b>\$735.8</b>	Minigrid Main Backbone	322.1	Minigrid Backbone Extensions to Create High Reliability / Resiliency	0.0
		<b>Total</b>	<b>\$392.5</b>	Minigrid Main Backbone	0.0
				<b>Total</b>	<b>\$342.5</b>



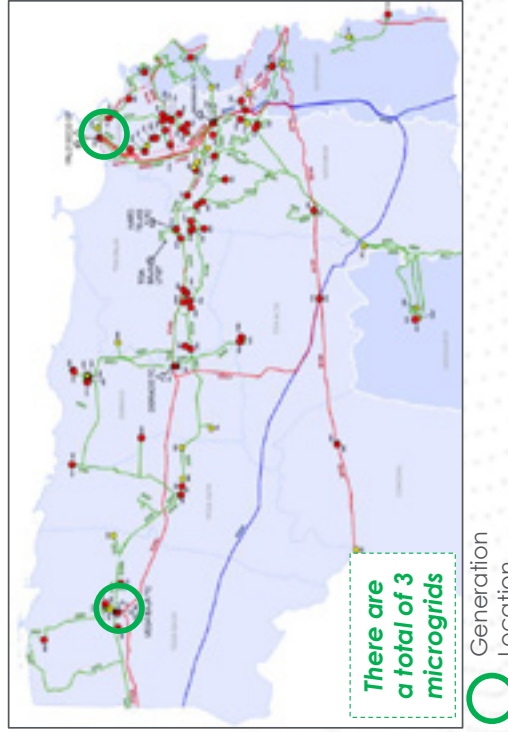
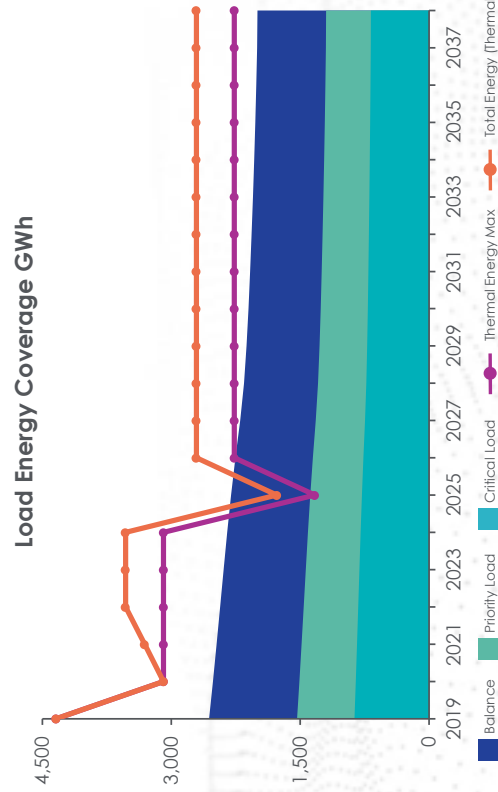


Exhibit E: PREPA Management Presentation

## FUTURE SYSTEM – BAYAMON MINIGRID

**SUBJECT TO  
REVISION BY  
PREB ORDER**

\$475MM IN TRANSMISSION INVESTMENTS FOR THE BAYAMON MINIGRID. CRITICAL LOADS ARE ALREADY COVERED.



### Minigrid Investment Costs (\$mm)

Total Investments		Cost	115 kV Investments		Cost	38 kV Investments		Cost
115 kV		\$254.8	Existing Infrastructure Hardening for Reliability		\$0.0	Interconnection of Critical Loads		\$208.7
38 kV		219.5	Interconnection of Minigrids		0.0	Interconnection of Minigrids		0.0
Minigrid Controller		0.7	Minigrid Backbone Extensions to Create High Reliability / Resiliency Zones		0.0	Existing Infrastructure Hardening for Reliability		0.0
<b>Total</b>		<b>\$475.0</b>	Minigrid Main Backbone		254.8	Minigrid Backbone Extensions to Create High Reliability / Resiliency		10.9
			<b>Total</b>		<b>\$254.8</b>	Minigrid Main Backbone		0.0
						<b>Total</b>		<b>\$219.5</b>



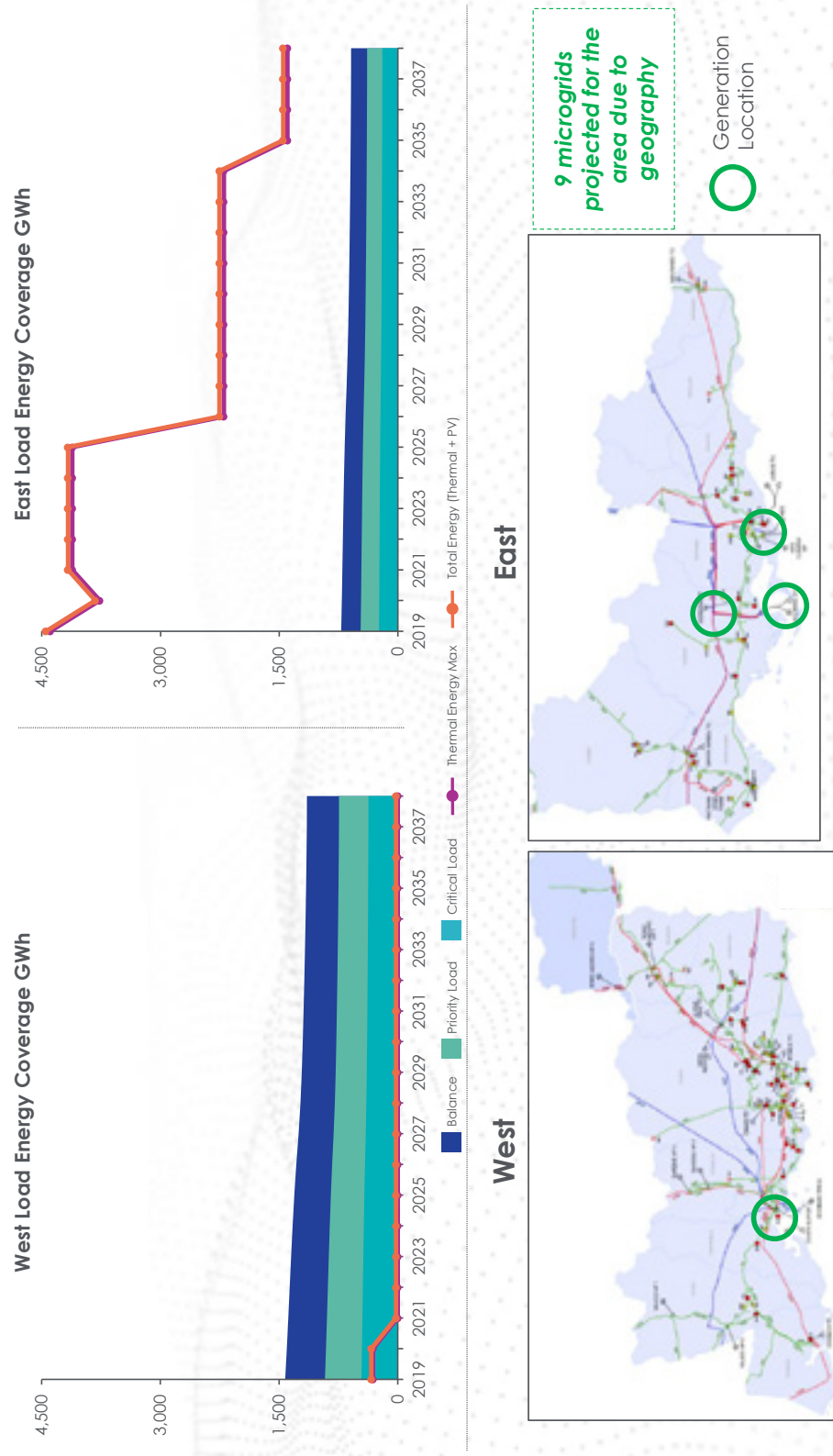


Exhibit E: PREPA Management Presentation

## FUTURE SYSTEM – PONCE EAST AND WEST MINIGRIDS

**SUBJECT TO  
REVISION BY  
PREB ORDER**

\$1,072MM IN TRANSMISSION INVESTMENTS FOR THE PONCE MINIGRIDS. CRITICAL LOADS ARE ALREADY COVERED BECAUSE PONCE EAST AND WEST ARE CONSIDERED PART OF THE SAME MINIGRID.







## FUTURE SYSTEM – PONCE MINIGRIDS (CONT'D)

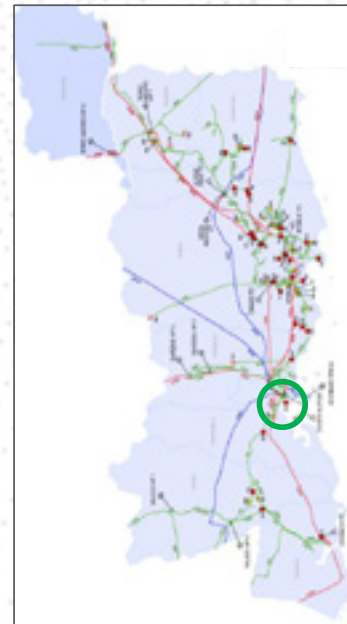
**SUBJECT TO  
REVISION BY  
PREB ORDER**

\$1,072MM IN TRANSMISSION INVESTMENTS FOR THE PONCE MINIGRIDS.

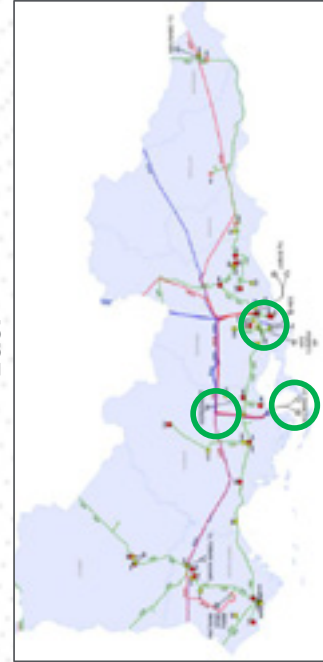
### Minigrad Investment Costs (\$mm)

Total Investments	Cost	115 kV Investments	Cost	38 kV Investments	Cost
115 kV	\$306.5	Existing Infrastructure Hardening for Reliability	\$0.0	Interconnection of Critical Loads	\$750.5
38 kV	764.1	Interconnection of Minigrads	0.0	Interconnection of Minigrads	13.6
Minigrad Controller	1.1	Minigrad Backbone Extensions to Create High Reliability / Resiliency Zones	0.0	Existing Infrastructure Hardening for Reliability	0.0
<b>Total</b>	<b>\$1,071.7</b>	Minigrad Main Backbone	306.5	Minigrad Backbone Extensions to Create High Reliability / Resiliency	0.0
		<b>Total</b>	<b>\$306.5</b>	Minigrad Main Backbone	0.0
				<b>Total</b>	<b>\$764.1</b>

West



East



Generation  
Location





## FUTURE SYSTEM – DISTRIBUTION INVESTMENTS

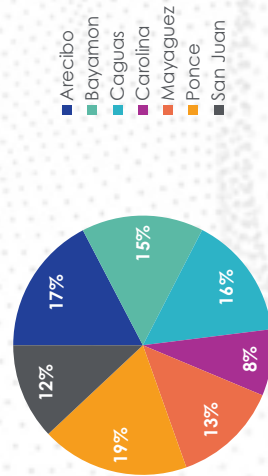
**SUBJECT TO  
REVISION BY  
PREB ORDER**



CENTRAL OBJECTIVE TO PROVIDE THE SAME LEVEL OF RESILIENCY AT THE DISTRIBUTION LEVEL TO CRITICAL LOADS AS IN THE TRANSMISSION / GENERATION SYSTEM BY UNDERGROUNDING OF FEEDERS AND CONVERTING TO GIS SELECTED SUBSTATIONS.

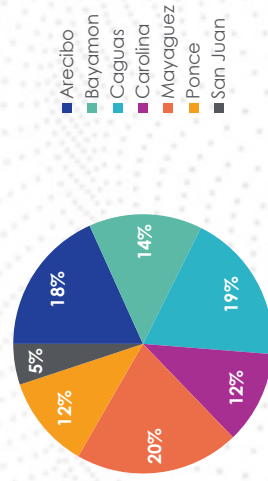
### Investment in GIS Substations

Cost	Cost (\$000)
Arecibo	\$30,731
Bayamon	26,968
Caguas	27,391
Carolina	14,676
Mayaguez	23,472
Ponce	32,691
San Juan	21,245
<b>Total</b>	<b>\$177,174</b>



### Total Investment

Cost	Cost (\$000)
Arecibo	\$134,005
Bayamon	103,635
Caguas	138,811
Carolina	84,741
Mayaguez	150,544
Ponce	85,190
San Juan	37,383
<b>Total</b>	<b>\$734,309</b>







## IRP: ACTION PLAN TRANSMISSION INVESTMENT



**SUBJECT TO  
REVISION BY  
PREB ORDER**

BELOW A SUMMARY OF EXPECTED INVESTMENTS WHERE RELIABILITY CORRESPONDS TO RECONSTRUCTION / HARDENING OF NON-MINIGRID RELATED INVESTMENTS (E.G. 230 KV).

### Minigrid Transmission Investments (2018 \$mm)

Technical Justification	Priority 1	Priority 2	Priority 3	Priority 4	Priority 5
	2020 - 2022	2023 - 2024	2025 - 2026	2027	2028
115 kV Minigrid Transmission Investment					
Interconnection of Critical Loads	\$87.9	\$31.7	\$36.0	\$0.0	\$0.0
Interconnection of Minigrids	66.8	0.0	6.8	0.0	0.0
Minigrid Backbone Extensions	70.4	0.0	0.0	0.0	0.0
Minigrid Main Backbone	1,615.7	220.2	59.1	101.9	70.3
Existing Infrastructure Hardening for Reliability	80.9	31.5	100.3	20.8	11.1
Aging Infrastructure Replacement - Minigrids	126.0	38.8	11.3	15.5	5.0
<b>Total</b>	<b>\$2,047.7</b>	<b>\$322.2</b>	<b>\$213.5</b>	<b>\$138.3</b>	<b>\$86.4</b>
38 kV Minigrid Transmission Investment					
Interconnection of Critical Loads	\$1,678.5	\$413.1	\$212.8	\$75.3	\$33.1
Interconnection of Minigrids	24.7	20.9	9.7	0.0	13.6
Minigrid Backbone Extensions	38.9	49.0	18.9	28.5	0.0
Minigrid Main Backbone	28.7	0.0	6.9	0.0	0.0
Existing Infrastructure Hardening for Reliability	49.9	136.4	64.3	101.3	42.4
<b>Total</b>	<b>\$1,820.6</b>	<b>\$619.4</b>	<b>\$312.6</b>	<b>\$205.1</b>	<b>\$89.2</b>
Reliability Investments					
Aging Infrastructure Replacement	\$28.8	\$0.0	\$0.0	\$0.0	\$0.0
Existing Infrastructure Hardening for Reliability	354.4	408.1	359.8	448.6	279.8
<b>Total</b>	<b>\$383.1</b>	<b>\$408.1</b>	<b>\$359.8</b>	<b>\$448.6</b>	<b>\$279.8</b>



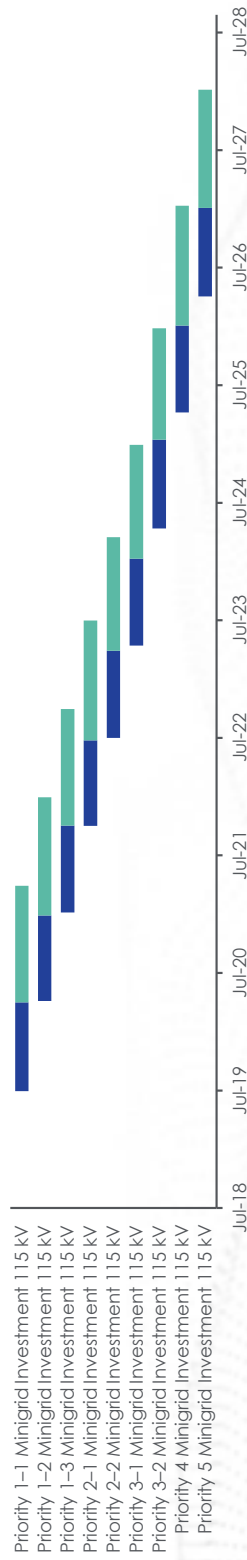


## IRP: ACTION PLAN TRANSMISSION TIMELINES

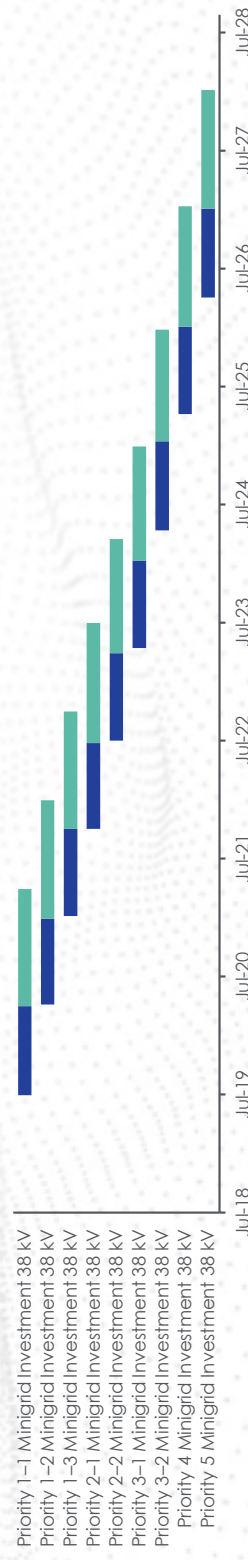
**SUBJECT TO  
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TIMELINES DEFINED CONSIDERING NUMBER OF PROJECTS THAT CAN BE CARRIED IN PARALLEL AND SUBJECT TO REVISION DURING ENGINEERING.

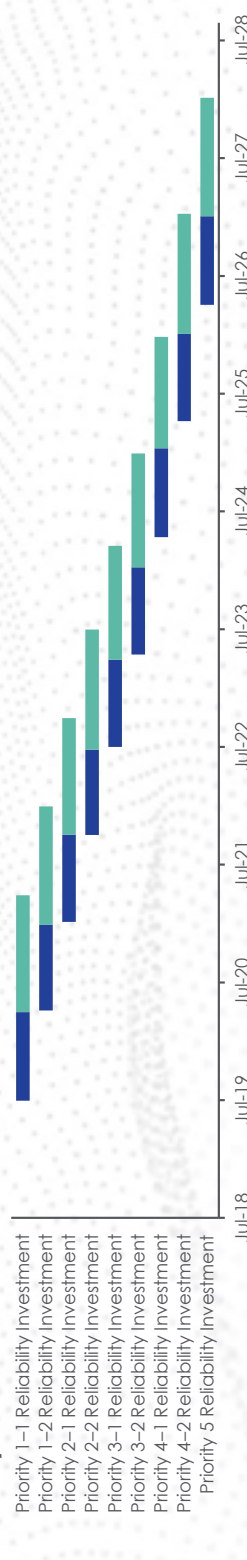
### 115 kV Minigridd Transmission Investment



### 38 kV Minigridd Transmission Investment



### Reliability Investments



Source: IRP.





Exhibit E: PREPA Management Presentation

## IRP: ACTION PLAN DISTRIBUTION INVESTMENT (CONT'D)

**SUBJECT TO  
REVISION BY  
PREB ORDER**



DISTRIBUTION INVESTMENT TIMELINE WAS IDENTIFIED CONSIDERING TRANSMISSION PROJECTS AND PRIORITY.

### Distribution Investments Timeline (2018 \$mm)

	Priority 1 2020-2022	Priority 2 2023-2024	Priority 3 2025	Priority 4 2026	Total
Substations GIS	\$81	\$52	\$22	\$22	\$177
Feeder	368	215	119	33	734
<b>Total</b>	<b>\$449</b>	<b>\$267</b>	<b>\$141</b>	<b>\$55</b>	<b>\$911</b>

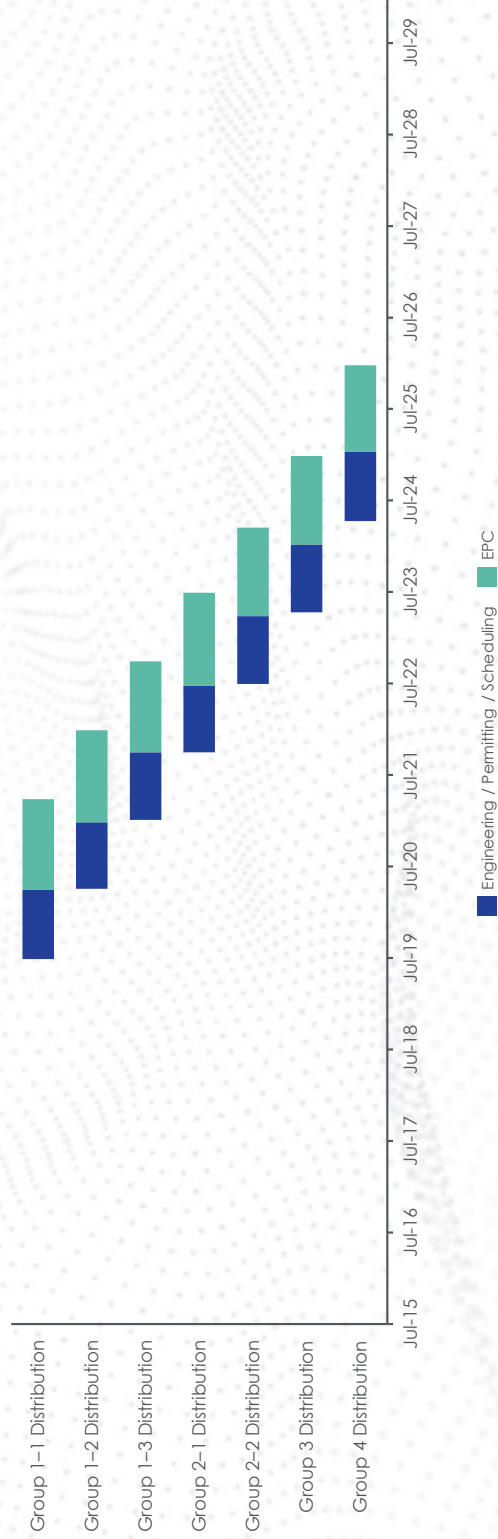






Exhibit E: PREPA Management Presentation

## T&D SYSTEM TRANSFORMATION OVERVIEW



PREPA'S T&D INFRASTRUCTURE WILL BE RESTORED AND MODERNIZED TO SUPPORT THE INTEGRATION OF RENEWABLES AND DISTRIBUTED RESOURCES AS WELL AS OVERALL EFFICIENCY, RELIABILITY, AND RESILIENCY.

### T&D Restoration and Rebuild Overview

- PREPA and relevant stakeholders have identified nine key areas of focus for T&D restoration and rebuild

- 1 Transmission and substations
- 2 Distribution
- 3 Distributed energy resources and minigrids / microgrids
- 4 Technology
- 5 Security (both physical and cyber)
- 6 System operations
- 7 Emergency response and preparedness
- 8 Energy policy and regulatory support
- 9 Operational efficiency

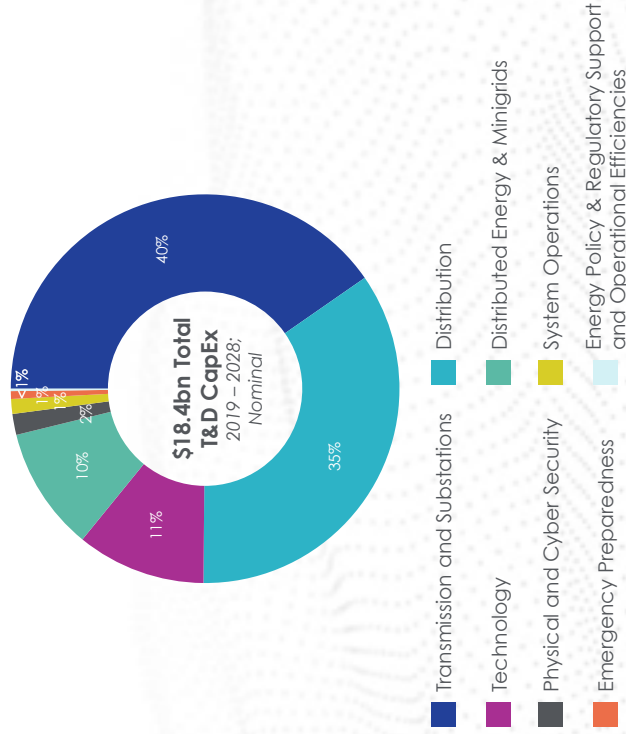
- Resources will be devoted to hardening the overall system, upgrading the system to withstand hurricane-force winds, and modernizing system design standards to be in-line with the mainland U.S.
- Minigrids and microgrids will play a key role in supporting resiliency across the island
- T&D restoration and rebuild will complement the generation plan for Puerto Rico
  - Deployment of restoration capex will be assisted by the Private Party

Note: Figures reflect nominal dollars. Assumes annual inflation of 2%.

Source: PREPA, COR3, and Navigant.

1. As an example, the T&D cost estimates do not contemplate the wholesale replacement of every single pole and wire in PREPA's T&D system. Those poles and wires that are in good working condition will continue to operate.

### 2019 – 2028 T&D CapEx by Area of Focus



Note that the T&D cost estimates **do not reflect a wholesale replacement of the current infrastructure**<sup>1</sup>, but rather represent a prioritized storm hardening plan for portions of the power grid based on asset damage and immediate grid needs





Exhibit E: PREPA Management Presentation

T&D PRIORITY PROJECT LIST			
<div> </div>	<div> <b>Transmission and Substations</b>                      \$7.4bn Total CapEx                 </div> <ul style="list-style-type: none"> <li>Harden the power delivery system to withstand hurricane-force winds</li> <li>Buildout of electrical "island" minigrids will improve overall flexibility, resiliency, and facilitate the integration of renewables and distributed generation</li> <li>System will be built using widely-accepted design standards</li> <li> <b>Priority projects:</b> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Hardening north-south transmission lines from southern generating units to San Juan</li> <li><input checked="" type="checkbox"/> Short-term spending on critical substations and substations in flood-prone areas</li> <li><input checked="" type="checkbox"/> Targeting 38 kV transmission lines for rebuild to 115 kV design standard for future voltage conversion</li> </ul> </li> </ul>	<div> <b>Distribution</b>                      \$6.4bn Total CapEx                 </div> <ul style="list-style-type: none"> <li>Harden the distribution system, with redundancies via automatic feeder switching configurations and near real-time operational control</li> <li>Distribution system will accommodate a high level of distributed energy resources while providing resiliency to critical infrastructure and customer loads</li> <li> <b>Priority projects:</b> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Near-term upgrades to lines that serve critical customers and loads</li> <li><input checked="" type="checkbox"/> Undergrounding of the overhead lines with high exposure to wind and tree / vegetation damage</li> <li><input checked="" type="checkbox"/> Automation of feeder switching technologies and configurations</li> </ul> </li> </ul>	<div> <b>Technology</b>                      \$2.0bn Total CapEx                 </div> <ul style="list-style-type: none"> <li>Upgrade energy system with modern, reliable, and resilient technology for advanced monitoring and control, sensing, and self-healing capabilities</li> <li> <b>Priority projects:</b> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Advanced metering infrastructure / smart meters</li> <li><input checked="" type="checkbox"/> Smart street lighting</li> <li><input checked="" type="checkbox"/> Distribution automation communication (field area network)</li> <li><input checked="" type="checkbox"/> Supervisory Control and Data Acquisition ("SCADA") communications equipment and program to enable buildout and control of minigrids</li> </ul> </li> </ul>
	<div> <b>Distributed Energy and Minigrids</b>                      \$1.9bn Total CapEx                 </div> <ul style="list-style-type: none"> <li>Support resiliency following a major storm event</li> <li>Installation of distributed energy resources and minigrids / microgrids will improve the time to recover from outages</li> <li> <b>Priority projects:</b> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Complete minigrd / microgrid studies by PREPA, Siemens, and the Sandia National Laboratory</li> <li><input checked="" type="checkbox"/> Commence planning process for energy efficiency and demand response program rollouts</li> <li><input checked="" type="checkbox"/> Begin planning the distributed energy resource program to guide resource installations</li> </ul> </li> </ul>	<div> <b>Physical and Cyber Security</b>                      \$320mm Total CapEx                 </div> <ul style="list-style-type: none"> <li>Complement infrastructure upgrades with both physical and cyber security investments</li> <li> <b>Priority projects:</b> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Identify and assess PREPA critical facilities</li> <li><input checked="" type="checkbox"/> Baseline cybersecurity and physical security posture and tools assessment for high risk facilities</li> <li><input checked="" type="checkbox"/> Implementation of various cyber and information technology protection measures (e.g. firewalls, remote access, SCADA, etc.)</li> <li><input checked="" type="checkbox"/> Implementation of a physical and cyber program build (e.g. North American Electric Reliability Corporation ("NERC") standards)</li> <li><input checked="" type="checkbox"/> Enhance protections at non-critical substations</li> <li><input checked="" type="checkbox"/> Improve on and develop a security operations center</li> </ul> </li> </ul>	<div> <b>Operations, Efficiencies, &amp; Preparedness</b>                      \$382mm Total CapEx<sup>1</sup> </div> <ul style="list-style-type: none"> <li>Harden facilities with advanced technologies capable of withstanding future storm events</li> <li>Initiatives to improve operational efficiency including an asset management program, a skills training program, and a PREPA Center for Innovation</li> <li>Emphasis on emergency preparedness and disaster recovery investments</li> <li> <b>Priority projects:</b> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Hardening of control centers and the emergency operations center</li> <li><input checked="" type="checkbox"/> Formulation of an emergency response and mutual assistance plan</li> <li><input checked="" type="checkbox"/> Formulation of a supply and logistics plan</li> <li><input checked="" type="checkbox"/> Preparation for the next hurricane season, including taking inventory of spare parts, trucks, and other equipment</li> <li><input checked="" type="checkbox"/> Development of an Emergency Operations Center</li> </ul> </li> </ul>
	<p>Note: Figures are in nominal dollars. Assumes annual inflation of 2%. Source: PREPA, COR3, and Navigant.</p> <p>1. Includes \$13mm earmarked for energy policy and regulatory support projects.</p>		
	50		





Exhibit E: PREPA Management Presentation

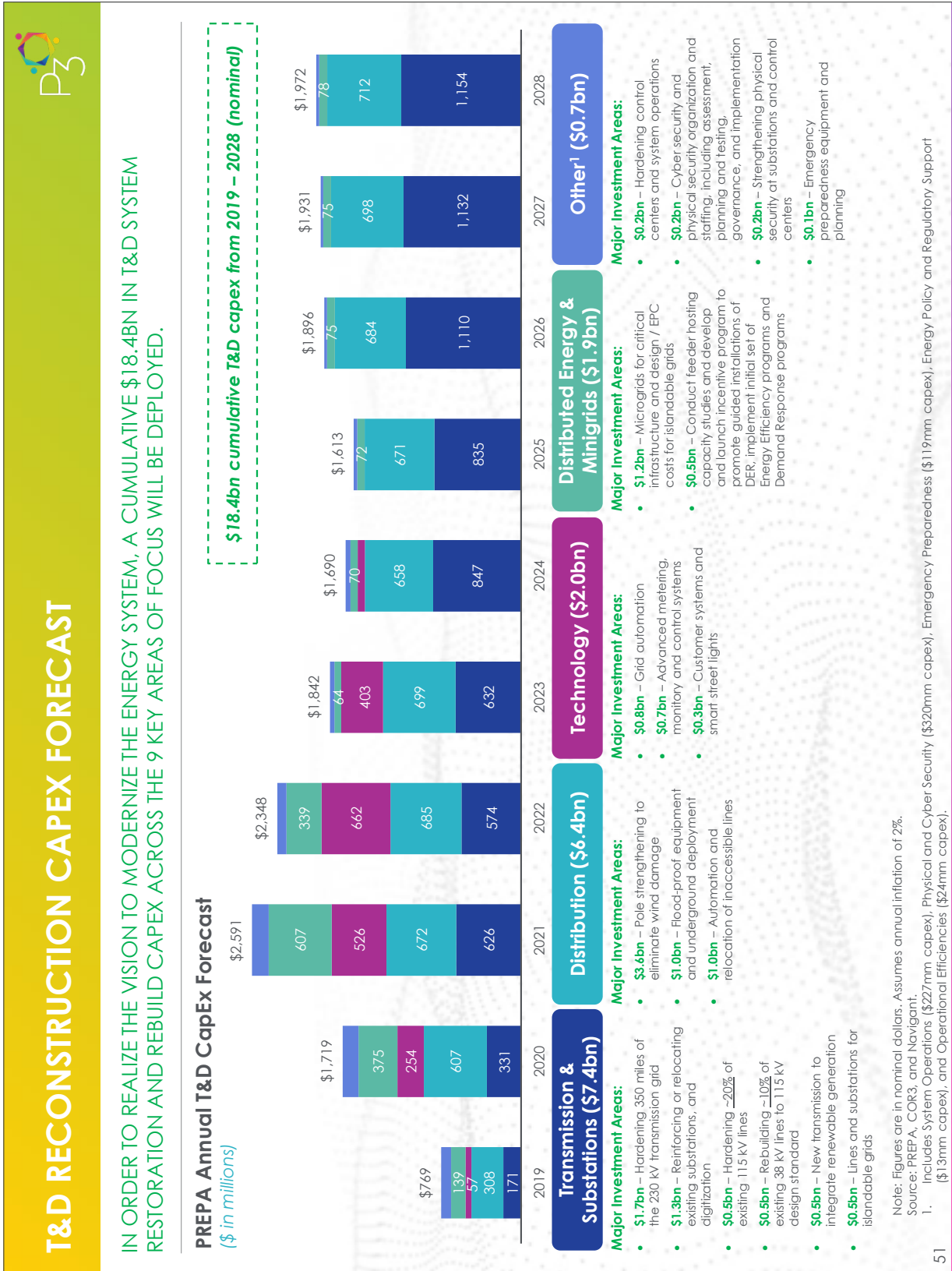






Exhibit E: PREPA Management Presentation







## TRANSMISSION AND DISTRIBUTION DIRECTOR OFFICE



### Transmission & Distribution Directorate

Jose Sepulveda, Eng.

- Establish the public policy and regulations necessary for the operation, maintenance, and construction of the electric system
- Responsible for the operation, maintenance, and construction of the T&D system
- Recommend and exercise internal controls of the T&D budget with the Budget Control Office
- Responsible for procedures execution and outsourcing key services

### T&D Employees by Labor Classification

*The T&D Directorate has 2,216 employees as of January 2019. ~79% of these employees are a member of one of PREPA's 4 labor unions*

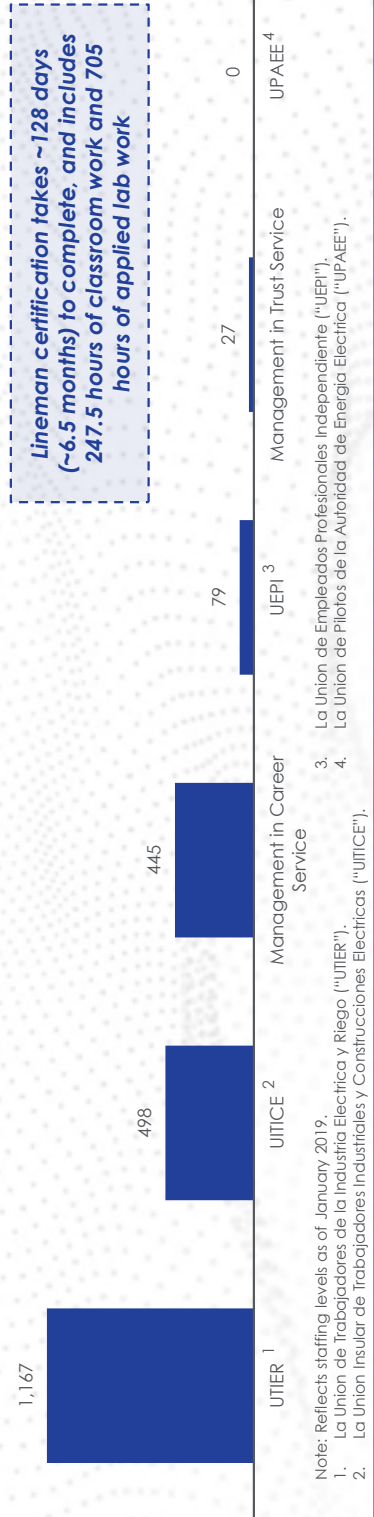






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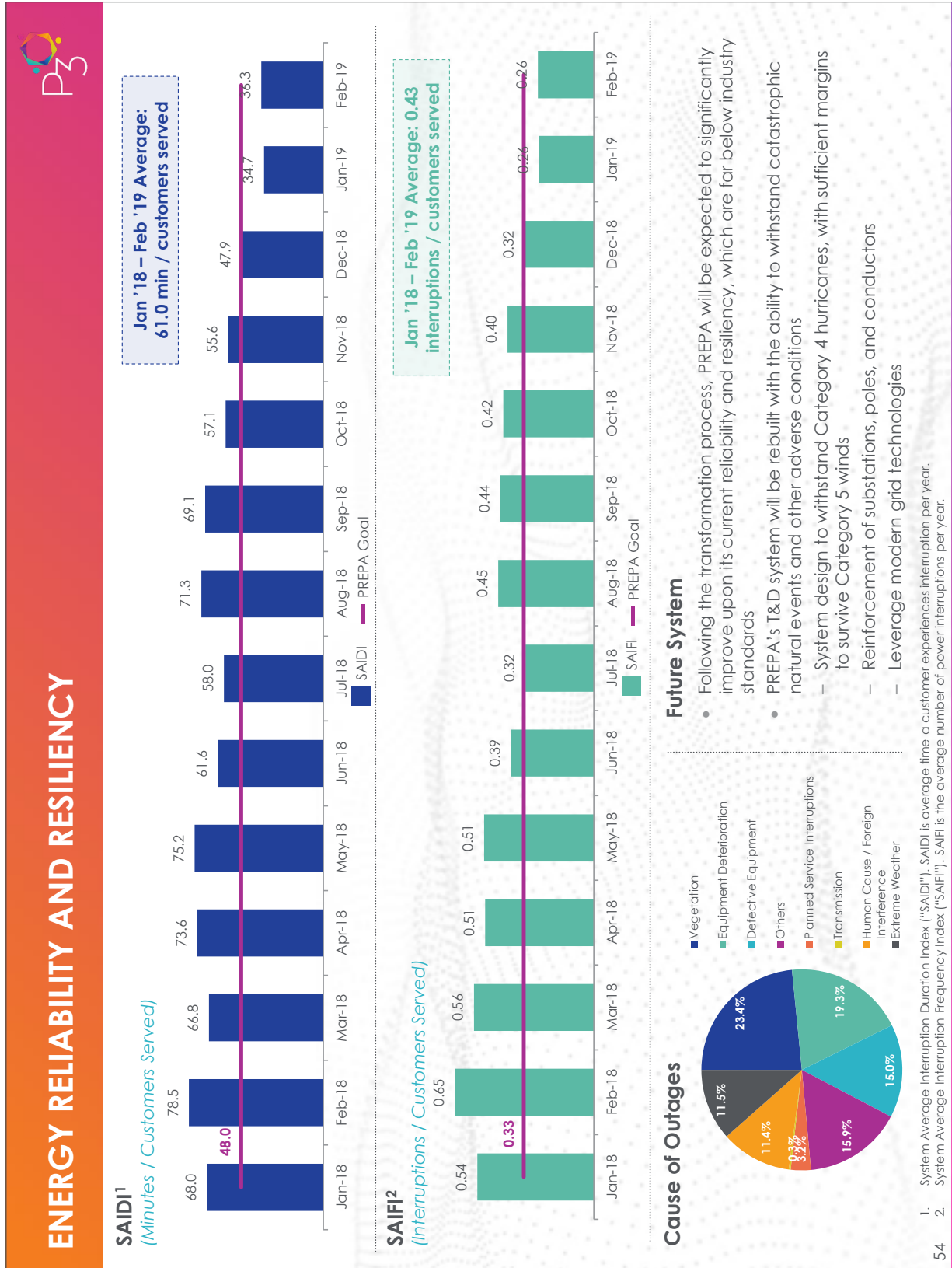
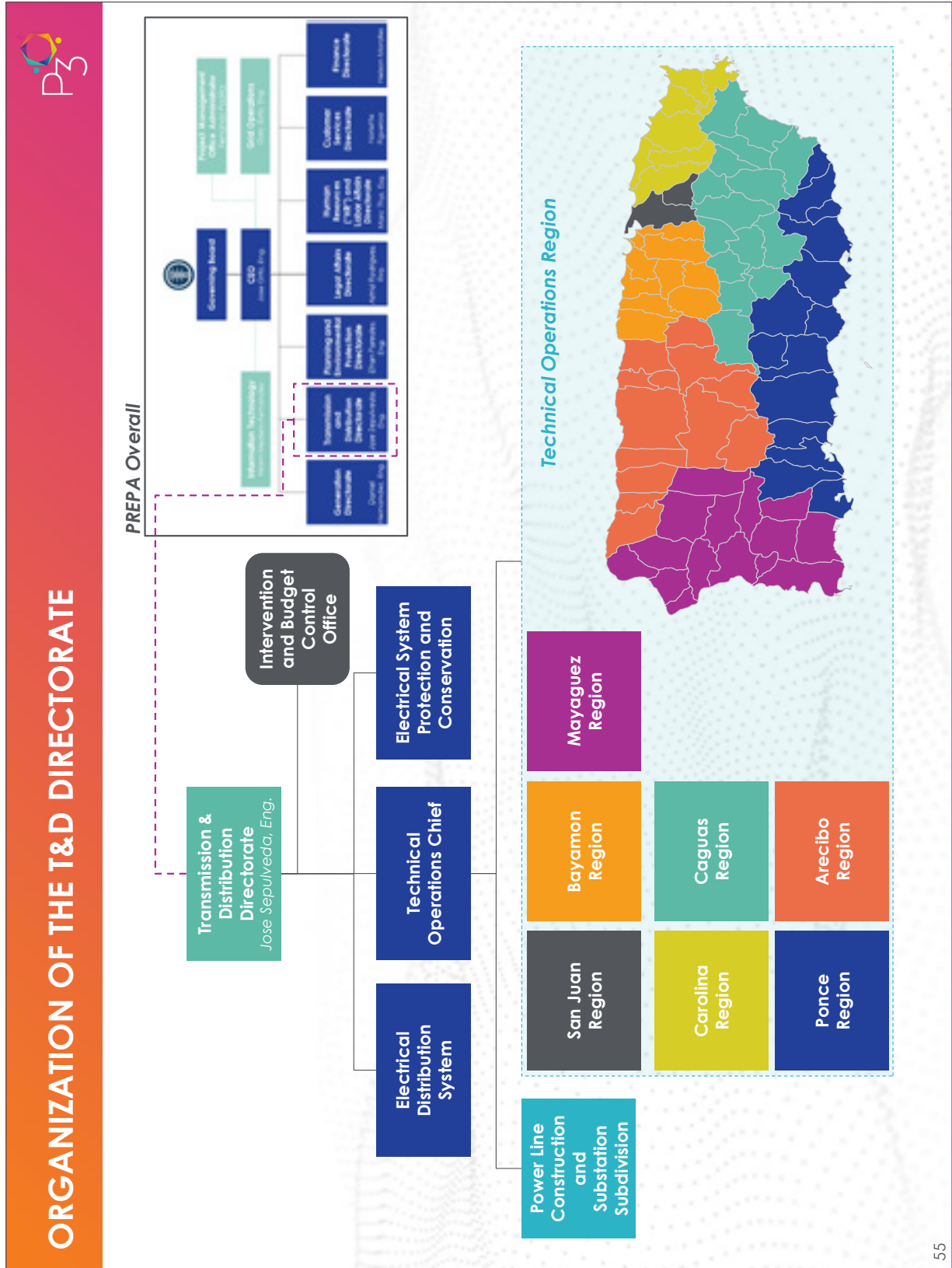






Exhibit E: PREPA Management Presentation





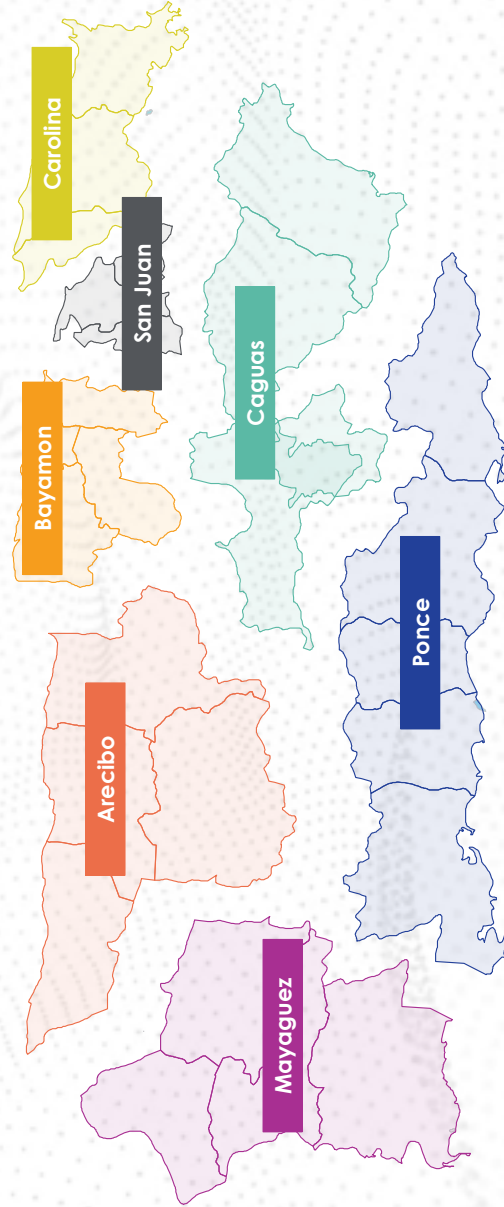


## TRANSMISSION AND DISTRIBUTION CHIEF OF OPERATIONS OFFICE



- Implementation of public policy
- Operations and maintenance
  - Regions
    - Districts
    - Distribution engineering departments
    - Regional construction offices
    - Distribution conservation
  - Live transmission

Distribution Primary Voltage Lines (Miles)									
7.62 / 13.2 kV		4.8 / 8.32 kV		4.16 / 7.2 kV		2.77 / 4.8 kV		2.4 / 4.16 kV	
OH	UG	OH	UG	OH	UG	OH	UG	OH	UG
2,565	2,525	3,709	348	422	59	17	1	6,652	508
5,090		4,057		481		18		7,160	
Poles and Structures									
Transmission Structures				Distribution Poles			Street Light Poles		
44,417				397,843			279,898		
Service Transformers									
Conventional		Pad Mount		Single 3 Phase		Submersible		Transclosure	
182,985		30,367		1,339		466		2,035	
16,806 Total									
213,352 Total									



56 Note: Overhead ("OH"), and underground ("UG").





## POWER LINE CONSTRUCTION AND SUBSTATION SUBDIVISION

- Implementation of public policy
- Construction and operation
  - Line construction, north and south
    - Transmission line repairs
- Substation construction



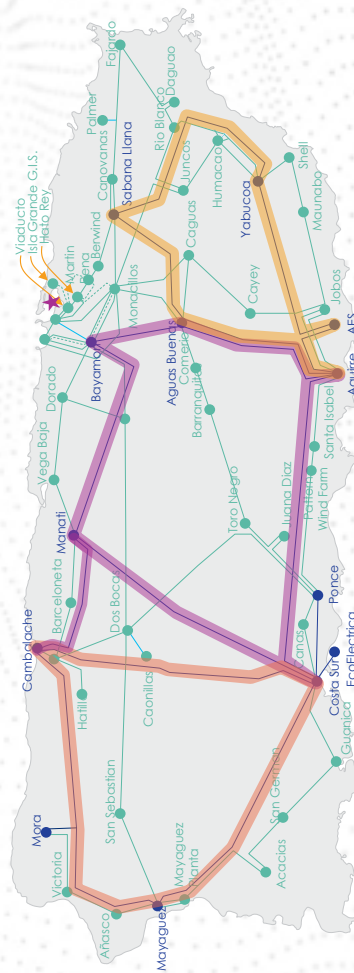
Transmission Lines (Miles)					
230 kV			115 kV		
OH	UG		OH	UG	
423	1		680	30	
424			710		
					1,549
					2,684 Total
Transmission Centers and Substations					
Transmission Center: 230 kV, 115 kV, and 38 kV			Substation: 38 kV		
178			279		
			Substation: 115 kV		
			61		

- Western Loop**

  - Connects Costa Sur and EcoElectrica with Mayaguez in the west and Cambalache in the north
  - Entered service in 2002
- Central Loop**

  - Connects Costa Sur, EcoElectrica and Aguirre in the south with San Juan in the north via a transmission centers at Agua Buenas, Manati and Bayamon
- Eastern Loop**

  - Connects Aguirre and AES in the south through transmission centers at Yabucoa in the east and Sabana Llan in the north
  - Entered service in 2006





## ELECTRICAL SYSTEM PROTECTION AND CONSERVATION



### Operation and Maintenance

- Substations and switchyards
  - Breaker conservation and replacement
  - Transformer conservation and replacement
  - Battery banks
  - Commissioning





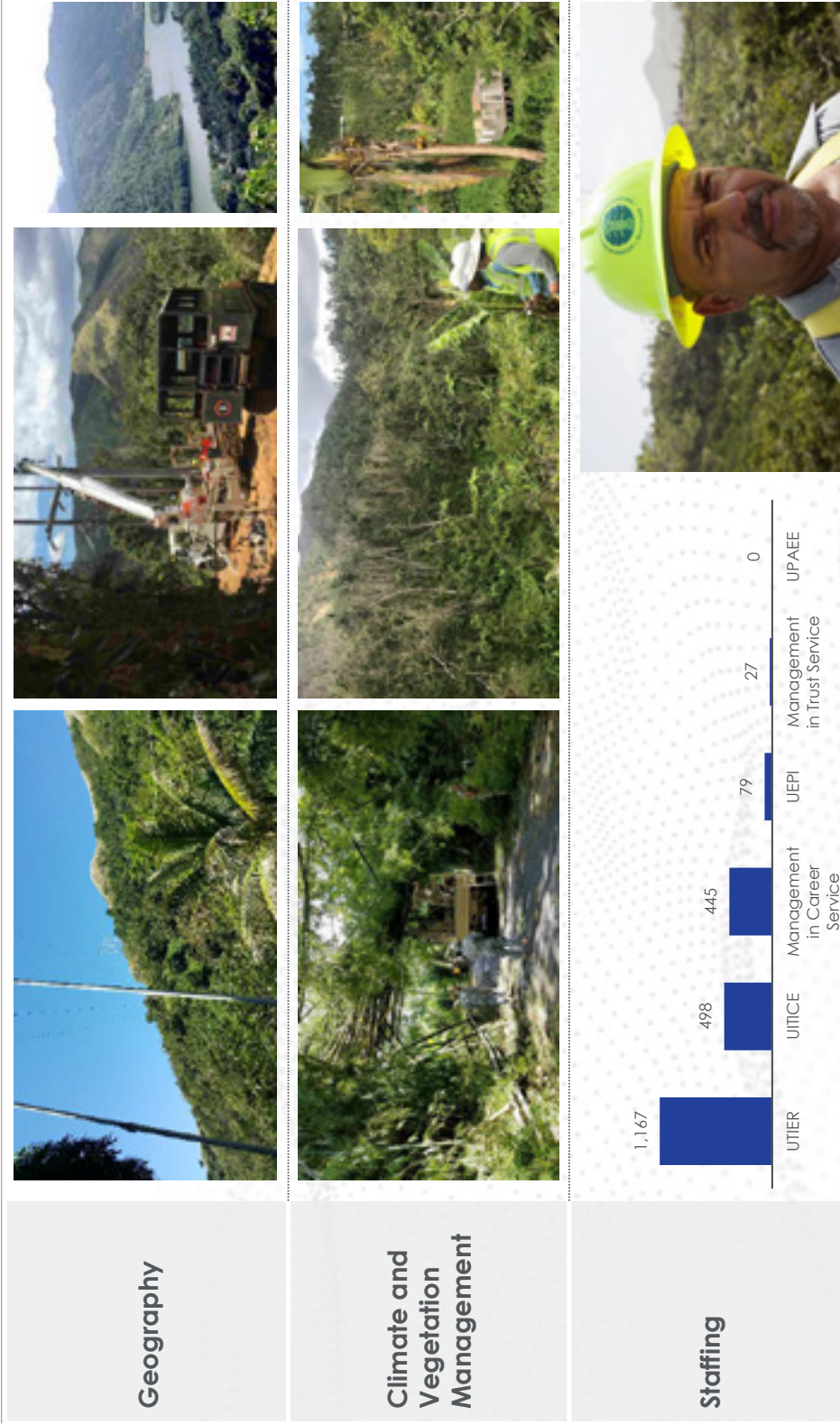


Exhibit E: PREPA Management Presentation

## T&D SYSTEM CHALLENGES



THE TRANSMISSION AND DISTRIBUTION SYSTEM FACES CHALLENGES FROM THE POPULATION DEMOGRAPHICS, GEOGRAPHY AND TROPICAL CLIMATE OF PUERTO RICO.



59 Note: Reflects staffing levels as of January 2019.





## VEGETATION MANAGEMENT PROGRAM



### Vegetation Management RFP Process Timeline

Milestone	Timing
Issue RFP	Early April 2019
Due Diligence and Q&A	Mid April 2019
RFP Proposal Submission	Early May 2019
RFP Shortlist	Early May 2019
RFP Negotiations and Proposal Clarifications	Mid May 2019
Selection announcement	Late May 2019

**PREPA anticipates a vegetation management budget of ~\$50mm**

### Development of an Effective Vegetation Management Program



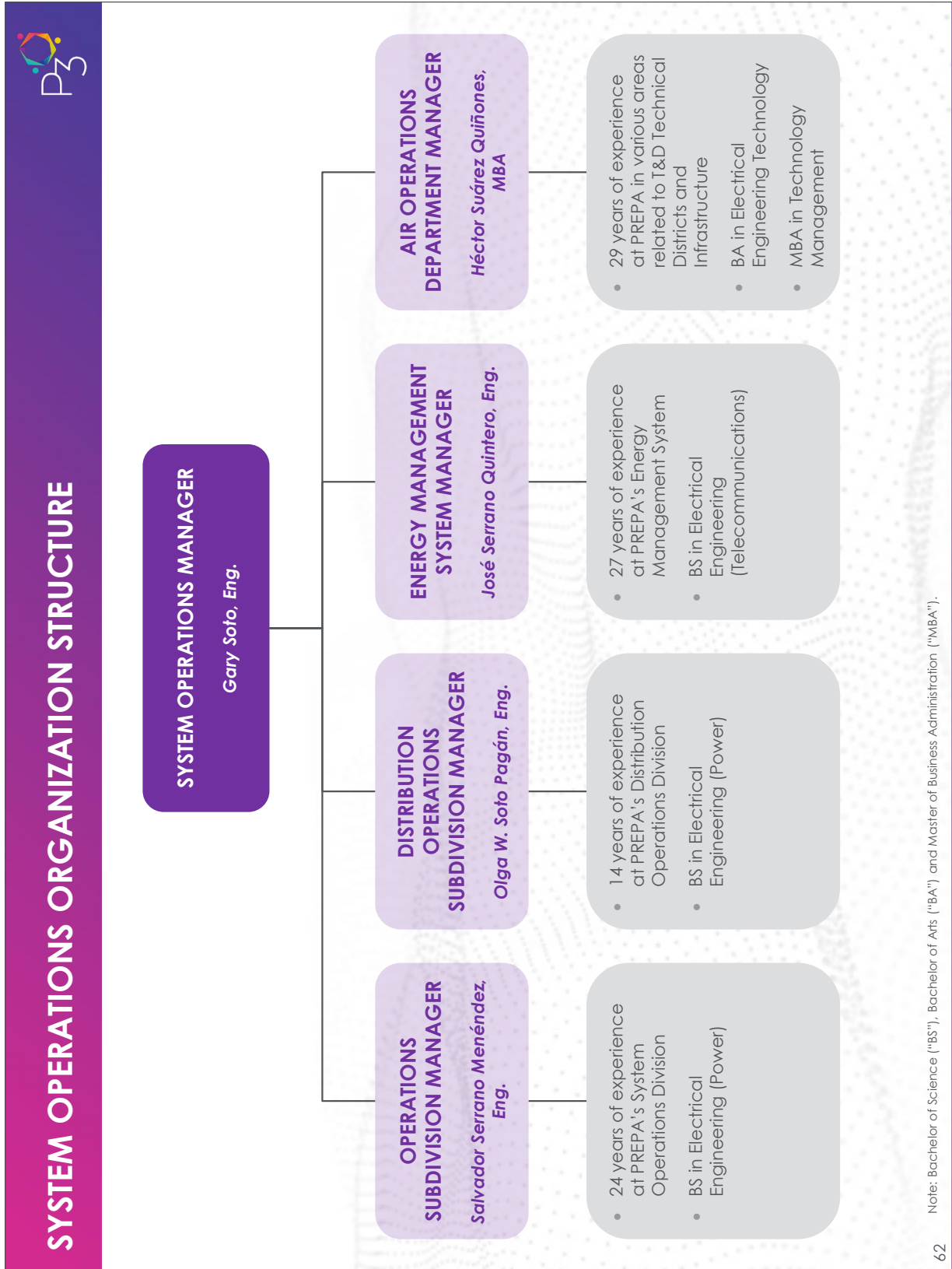




Exhibit E: PREPA Management Presentation











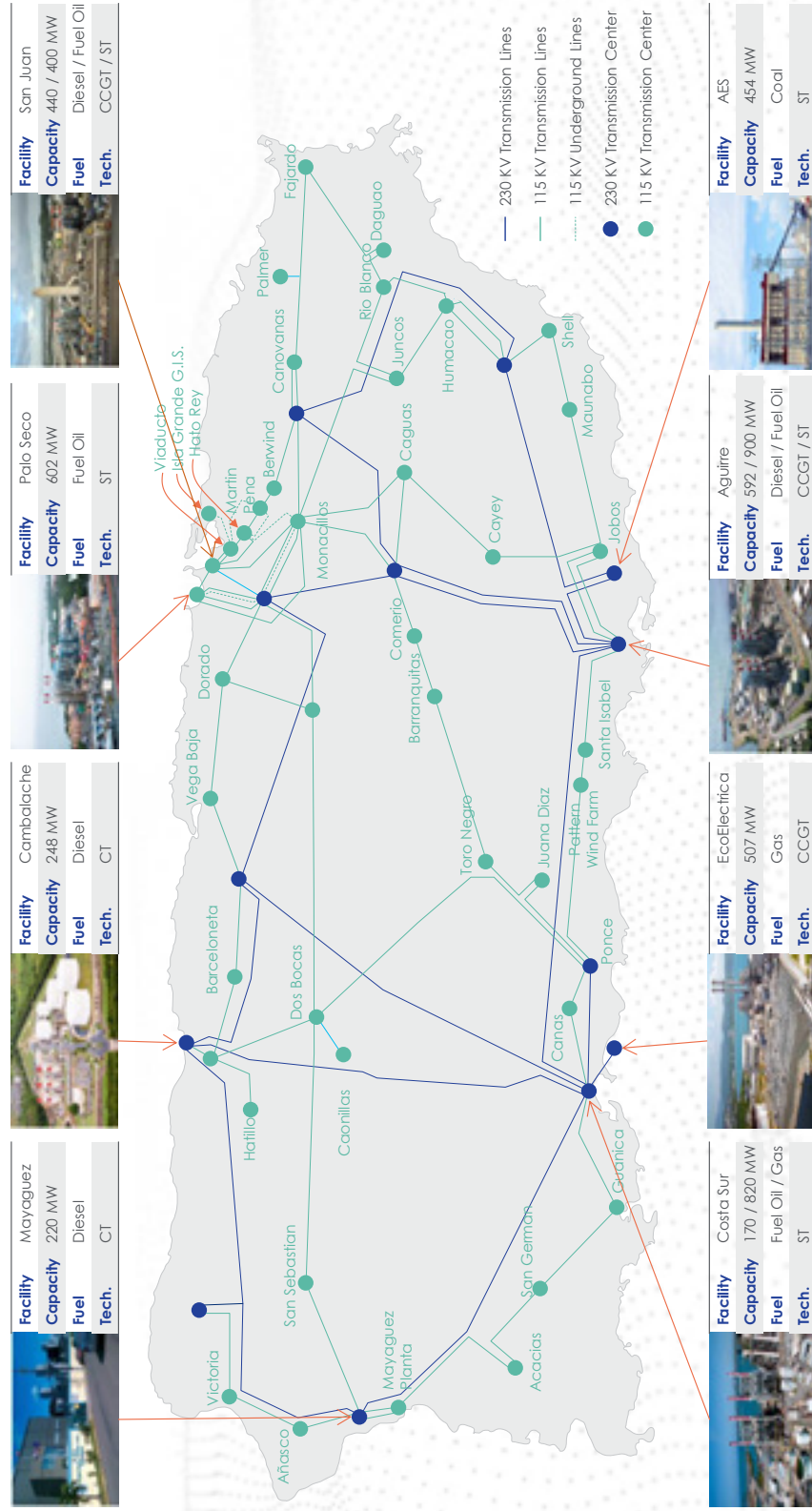
## SYSTEM MANAGEMENT STRATEGY

### Energy System Operations Overview

- The PREPA system has deteriorated and operates under a number of constraints
    - Includes old generation units with extended or unpredictable ramp times, frequent plant outages, transmission line constraints and derates caused by poor design and vegetation management, and frequent substation failures
  - Primary control center located in Monacillos (~7 miles south of San Juan)
    - Alternate control center is located in Ponce; capable of assuming system control if primary center becomes inoperable
  - SCADA systems are used to remotely control power flow and link the control center with the generation facilities and substations
    - If available, generation units are operated under Automatic Generating Control and Automatic Voltage Regulator equipment
  - PREPA operates generation facilities such that:
    - Hourly demand for electricity is met
    - There are sufficient synchronized spinning reserves and synchronized control reserves (responsive reserve) for frequency regulation and to ensure electrical system safety<sup>1</sup>
    - There are sufficient non-synchronized spinning reserves (operational reserve) in quick-response units to meet shifts in supply or demand<sup>2</sup>
  - Key system frequency and reliability targets include:
    - **Target frequency:** 60 Hz, managed within a + / - 0.2 Hz band; total system failures are likely below 58.6 Hz and above 61.4 Hz
    - **Target reliability:** "N-1 contingency," meaning that the system is operated to withstand 1 plant failure (but not more than 1)
  - Spinning reserves are an important part of PREPA's system management in order to maintain system stability and reliability
    - Maintaining significant spinning reserves allows PREPA to quickly respond to events such as failures at generating units, substations, or transmission lines
    - The level of spinning reserves depends on the availability of generation units, level of acceptable social and economic risk for system failures, and economic cost of running generation units below optimal efficiency levels
      - Key considerations for determining the level of spinning reserves include: availability of generation units; deviations in expected demand; fuel inventory; availability of the peaking Mayaguez facility, and compliance with environmental regulations
  - Under normal system conditions, the minimum target of synchronized spinning reserves is equal to the generating unit with the highest operating capacity in order to mitigate loss of the largest generation supply of the system (N-1 contingency)
    - At all times, PREPA maintains a minimum responsive reserve of 150 MW and operational reserve of 650 MW
  - If the spinning reserve capacity is insufficient to provide adequate reserve, PREPA will implement measures to maintain reliability of the system, such as load shedding
    - Automatic load shed (triggered if the system goes above 62.0 Hz or below 59.2 Hz) is configured by multi-level frequency blocks, and manual load shed is configured by multi-level 100 MW blocks of distribution feeders
1. Synchronized spinning reserve is the capacity of online spinning reserve that is synchronized with the electrical system and ready to meet the demand in a period no longer than 10 minutes within an interruption. Synchronized control reserve is the capacity of online frequency regulation reserve that is synchronized with the electrical system and is ready to maintain the target frequency.
  2. Non-synchronized spinning reserve is the non-rolling reserve capacity that is obtained using units that are not online but that can enter service and reach their available power in a period no longer than 10 minutes.



THE MAJORITY OF PUERTO RICO'S GENERATION CAPACITY IS LOCATED IN THE SOUTH, WITH 230 KV TRANSMISSION LINES CONNECTING THE FACILITIES TO MAJOR NORTHERN LOAD POCKETS.







## KEY SYSTEM OPERATIONS CONSIDERATIONS



PREPA'S GENERATION FLEET HAS HISTORICALLY BEEN OPERATED WITH AN OVER-EMPHASIS ON RELIABILITY, WITHOUT THE NEEDED BALANCE THAT ACCOUNTS FOR ECONOMIC CONSIDERATIONS.

System Considerations	Island System
	<ul style="list-style-type: none"> <li>Island based system is isolated and thus unable to import additional power for load balancing / voltage control / frequency control across system</li> <li>Significant fuel import infrastructure necessary to support new fossil generation / fuel conversion at existing plants</li> </ul>
	Transmission
	<ul style="list-style-type: none"> <li>Key load centers (i.e. Greater San Juan) are located in the north, while the most economic generation assets on the island are located in the south, separated by mountainous terrain</li> <li>Only three 230 kV transmission loops link generation from the south with demand in the north, leaving the grid vulnerable to hurricanes and other catastrophic events                             <ul style="list-style-type: none"> <li>Key transmission lines traverse mountainous areas, allowing for limited access for repairs or reconstruction</li> </ul> </li> <li>Transmission lines are operated at low percentages of total capacity for safety / reliability reasons, largely due to challenges with construction design, unmanaged vegetation growth, inability to predict electric flow, and overall system age</li> <li>Core units are relatively large as a percent of system peak load – single units tripping offline have potential to dramatically impact load balancing across system                             <ul style="list-style-type: none"> <li>Units are required to spend significant operating hours at partial load in order to maintain reliability, resulting in heat rate inefficiencies</li> </ul> </li> <li>High minimum stable loads</li> </ul>
	Unit Size
	<ul style="list-style-type: none"> <li>Slow ramp rates due to age and technology utilized by most of PREPA's fleet</li> <li>Limited quick-start capable capacity available to compensate for changes in load</li> </ul>
	Ramp Rates
	Environmental Compliance
	<ul style="list-style-type: none"> <li>Certain units are operationally limited in capacity factor in order to be compliant with Mercury &amp; Air Toxic Standards ("MATS"), the U.S. Environmental Protection Agency ("EPA") Consent Decree, and other environmental permits</li> <li>However, most units still run regardless of MATS compliance status</li> </ul>
	Operation Costs
	<ul style="list-style-type: none"> <li>PREPA-owned CCGTs on the island burn diesel, offsetting cost savings associated with lower heat rate</li> <li>Currently operating renewable facilities are designated "must run," yet have some of the most expensive generation costs on the island</li> <li>Historic operations based on redundancy / reliability; not balanced with economic considerations</li> </ul>
	Spinning Reserves
	<ul style="list-style-type: none"> <li>Significant amounts of spinning reserves are necessary in order to quickly react to potential unit trips / swings in system load                             <ul style="list-style-type: none"> <li>Spinning reserves have high heat rates / high fuel costs</li> </ul> </li> </ul>

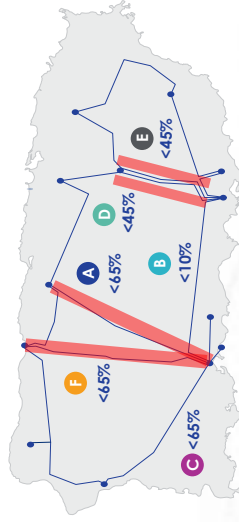




## SYSTEM OPERATIONAL CHALLENGES – STRUCTURAL / DESIGN

### THE TRANSMISSION AND DISTRIBUTION SYSTEM FACES CHALLENGES FROM THE DESIGN OF THE SYSTEM.

- The majority of load is located in the northern metropolitan areas (~70% of total load), however the bulk of the generation is in the south (~70% of online generation)
- The interior north / south transmission lines are the backbone of system operations and traverse mountainous, densely-vegetated terrain
  - Given the terrain and vegetation challenges, these key lines are vulnerable to outages
- Poor construction design, maintenance challenges, and problems related to land rights-of-way has led PREPA to operate the T&D lines far below their stated capacity
  - As the wires heat up, they sag, causing potential for fires, downed lines, and widespread outages
  - In general, PREPA's T&D lines are only operated at ~10% - 65% of their stated capacity
- PREPA does not have a transmission load flow model to analyze the movement of electricity in the system
  - As a result, it is difficult for PREPA to anticipate electricity flow should there be any changes to the transmission lines, including usage above normal levels
- Given the challenges in the design of transmission lines and in modeling system electricity flow, if a single transmission corridor becomes inoperable, there are significant effects to overall system reliability



Critical North / South 230 kV backbone

- A** 230 kV Line 50200: operate **below 65%** stated capacity
- B** 230 kV Line 50300: operate **below 10%** stated capacity
- C** 230 kV Line 50400: operate **below 65%** stated capacity
- D** 230 kV Line 50900: operate **below 45%** stated capacity
- E** 230 kV Line 51000: operate **below 45%** stated capacity
- F** 230 kV Line 51200: operate **below 65%** stated capacity





Exhibit E: PREPA Management Presentation





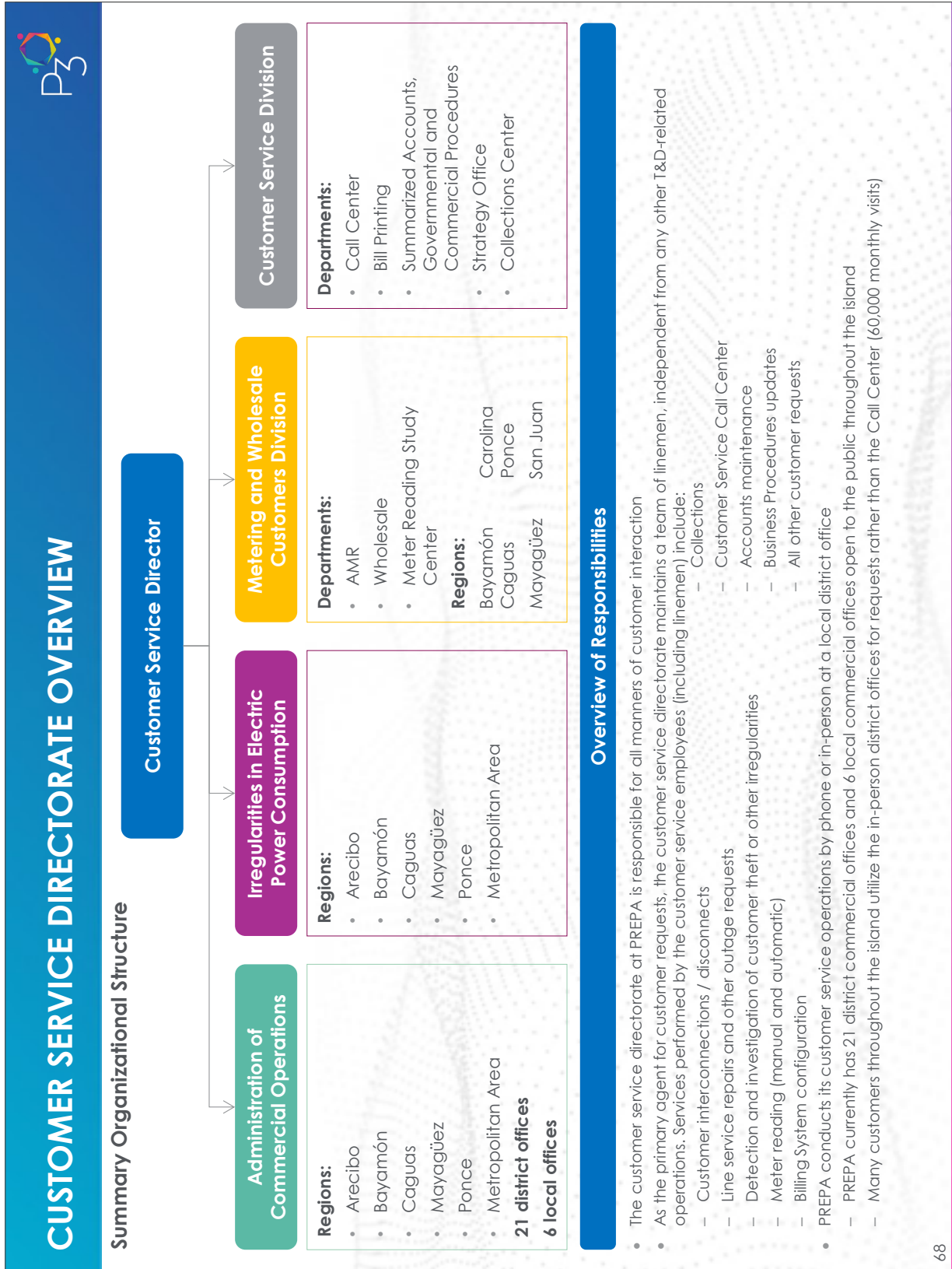
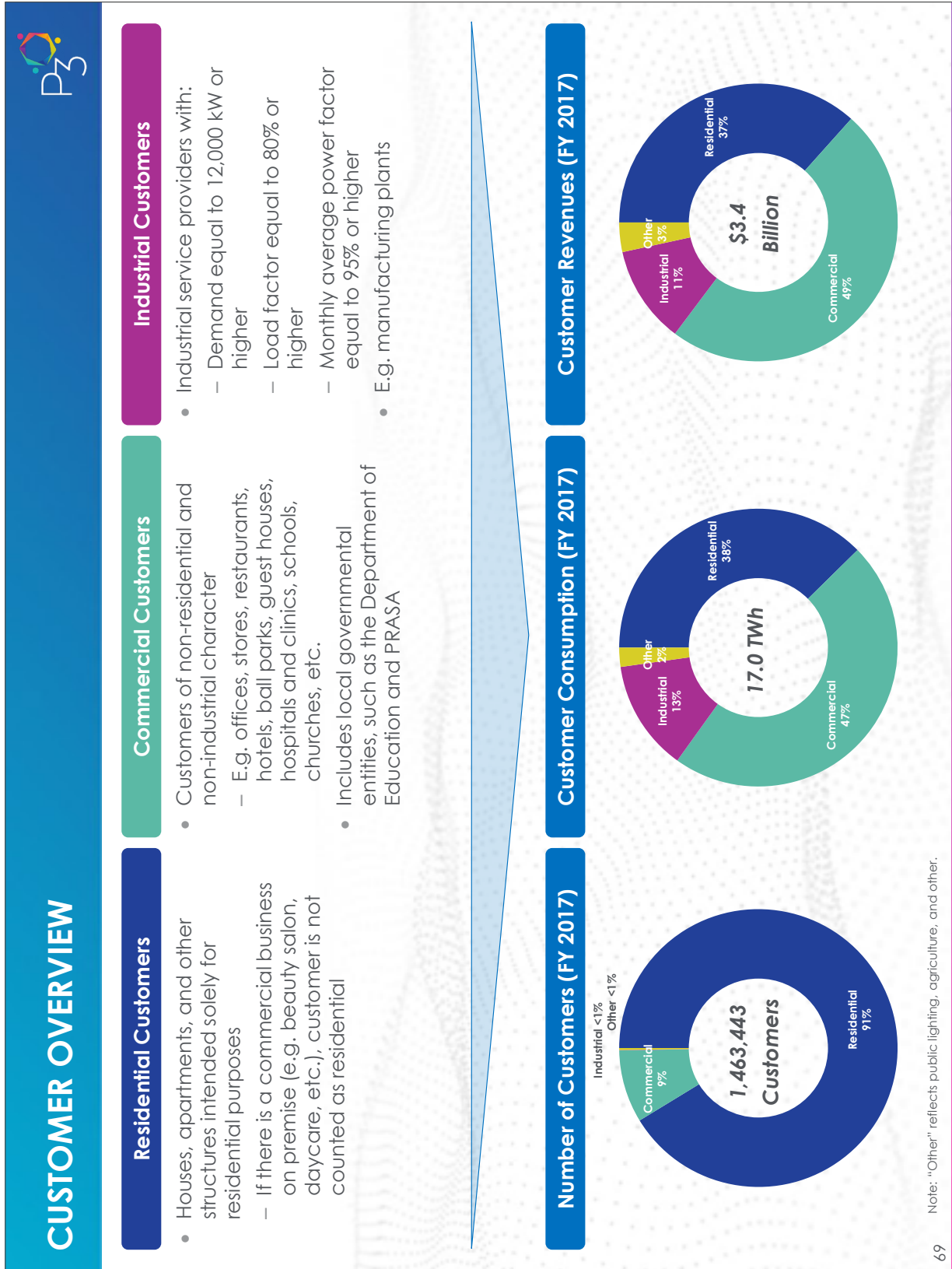






Exhibit E: PREPA Management Presentation





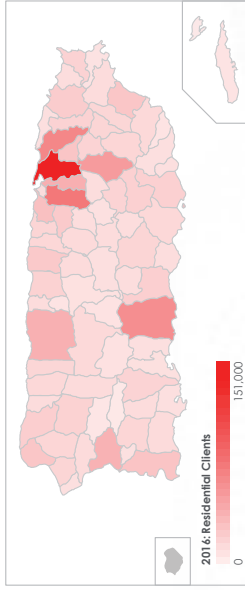


## CUSTOMER DENSITY

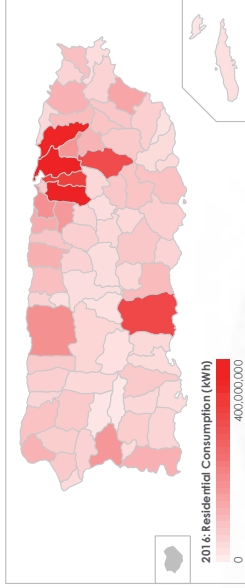
- The largest number of residential and commercial clients are based in the San Juan and Ponce regions
- Industrial clients are primarily located in San Juan and Ponce, with a large number located in Caguas, Guaynabo, and Bayamon
- Manufacturing is one of the largest contributors to Puerto Rico's economy
- Key manufacturing industries are pharmaceuticals and medical devices, but others industries include electronics, apparel, and petrochemicals
- PREPA's top 3 largest customers by electricity consumption are:
  - PRASA
  - Puerto Rico Department of Education
  - U.S. Navy

### Residential Customers

Number of Customers

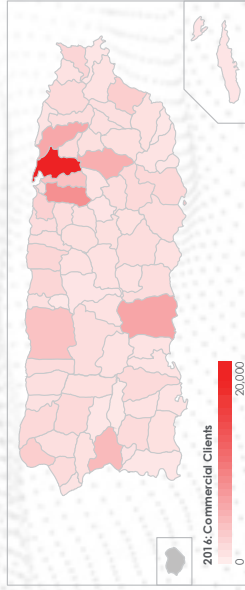


Customer Load

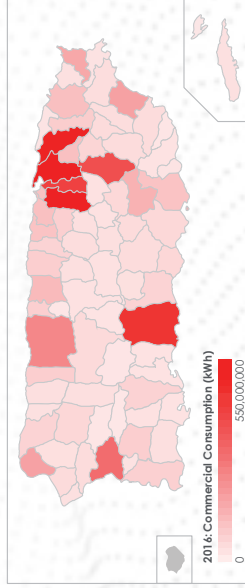


### Commercial Customers

Number of Customers

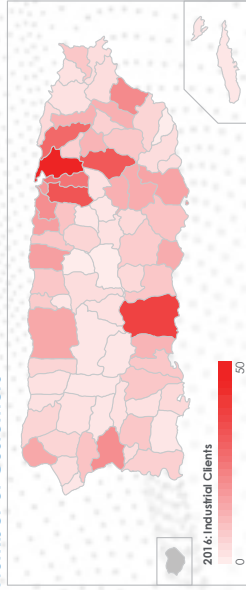


Customer Load



### Industrial Customers

Number of Customers



Customer Load

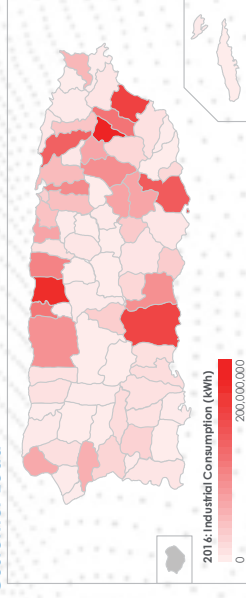






Exhibit E: PREPA Management Presentation

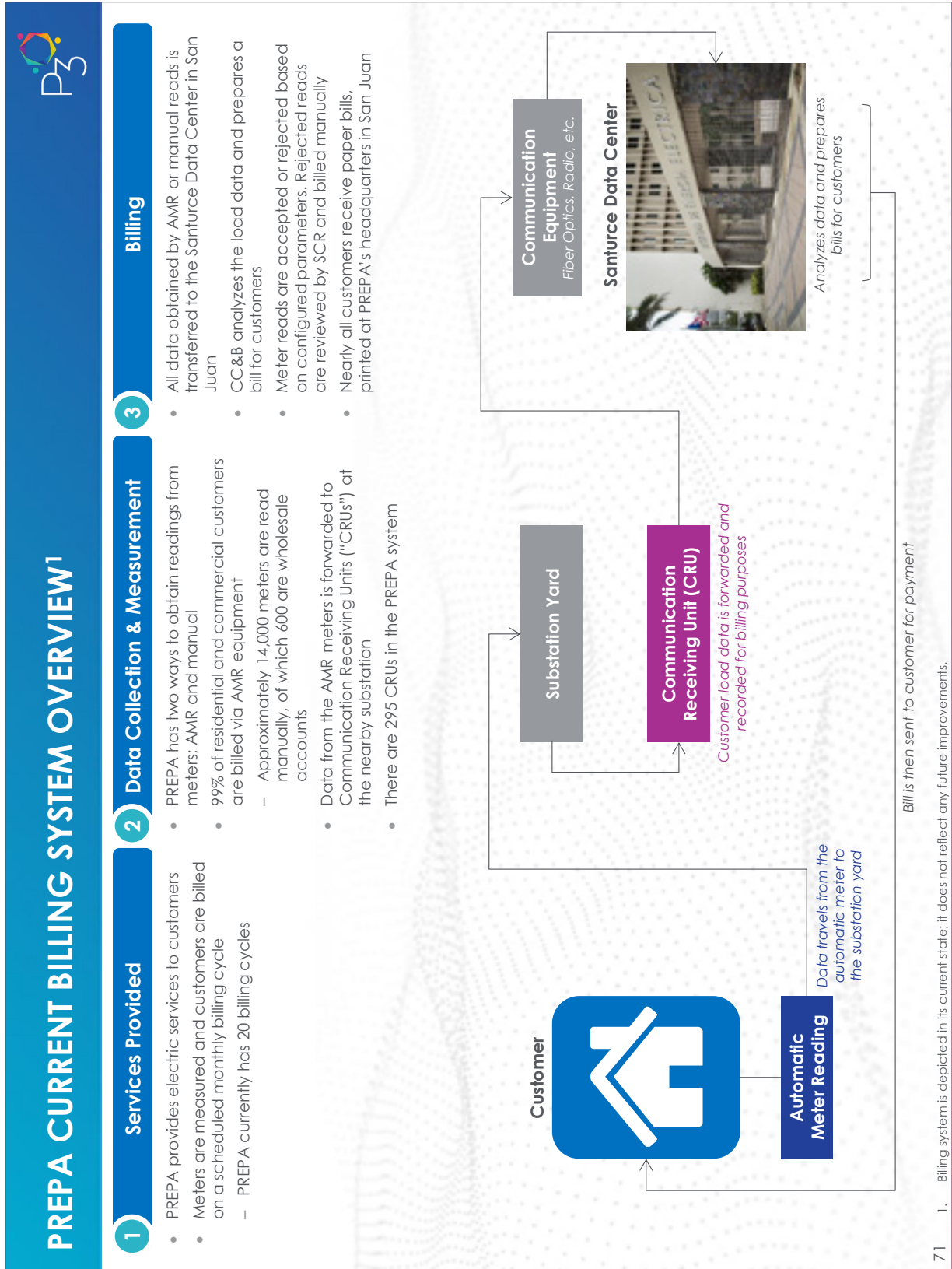




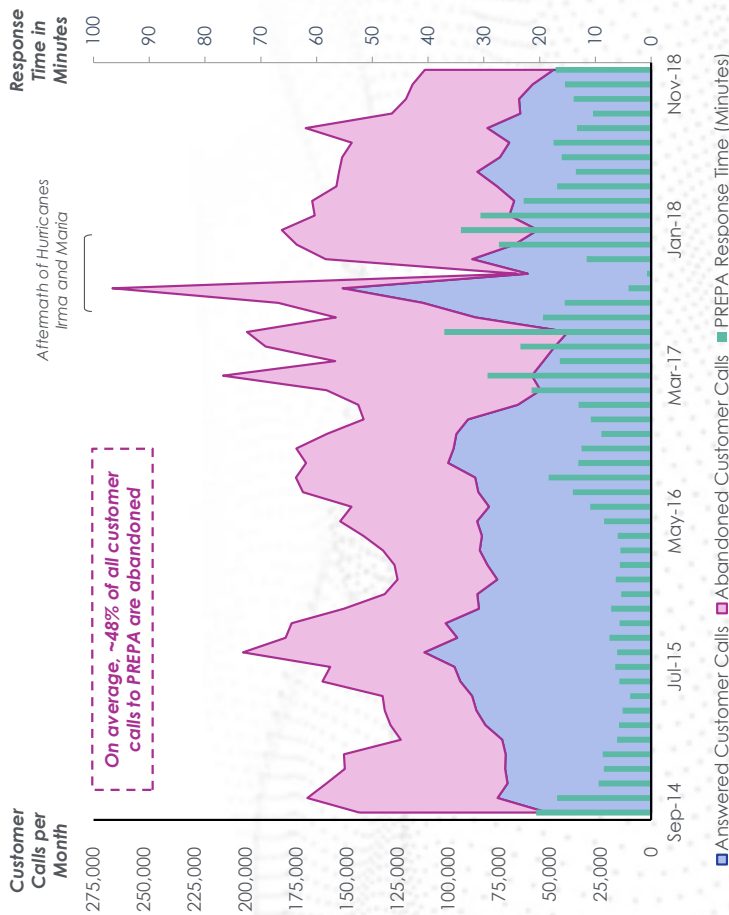


Exhibit E: PREPA Management Presentation

# SNAPSHOT OF CUSTOMER SATISFACTION



## Customer Call and Wait Times<sup>1</sup>

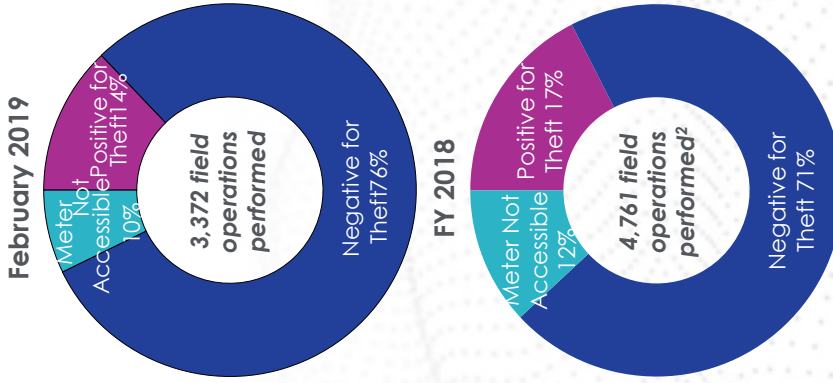


- PREPA has historically worked with an outside call center for roll-over and overflow customer calls
  - Customer calls would rarely be routed directly to the outside call center, instead waiting in a PREPA call center queue for a period of time first
- In December 2017, the contract with the outside call center was cancelled due to breach of contract. PREPA recruited emergency customer service representatives to reinforce the operations
- In February 2019, PREPA initiated an RFP process for a call center to manage the overflow customer calls

<sup>1</sup>. Excludes customer service provided at in-person district offices.

<sup>2</sup>. During hurricane-related emergency recovery, irregularity-related customer service operations were mostly suspended, causing the annual total for FY 2018 to be relatively low.

## Electric Power Consumption Irregularities

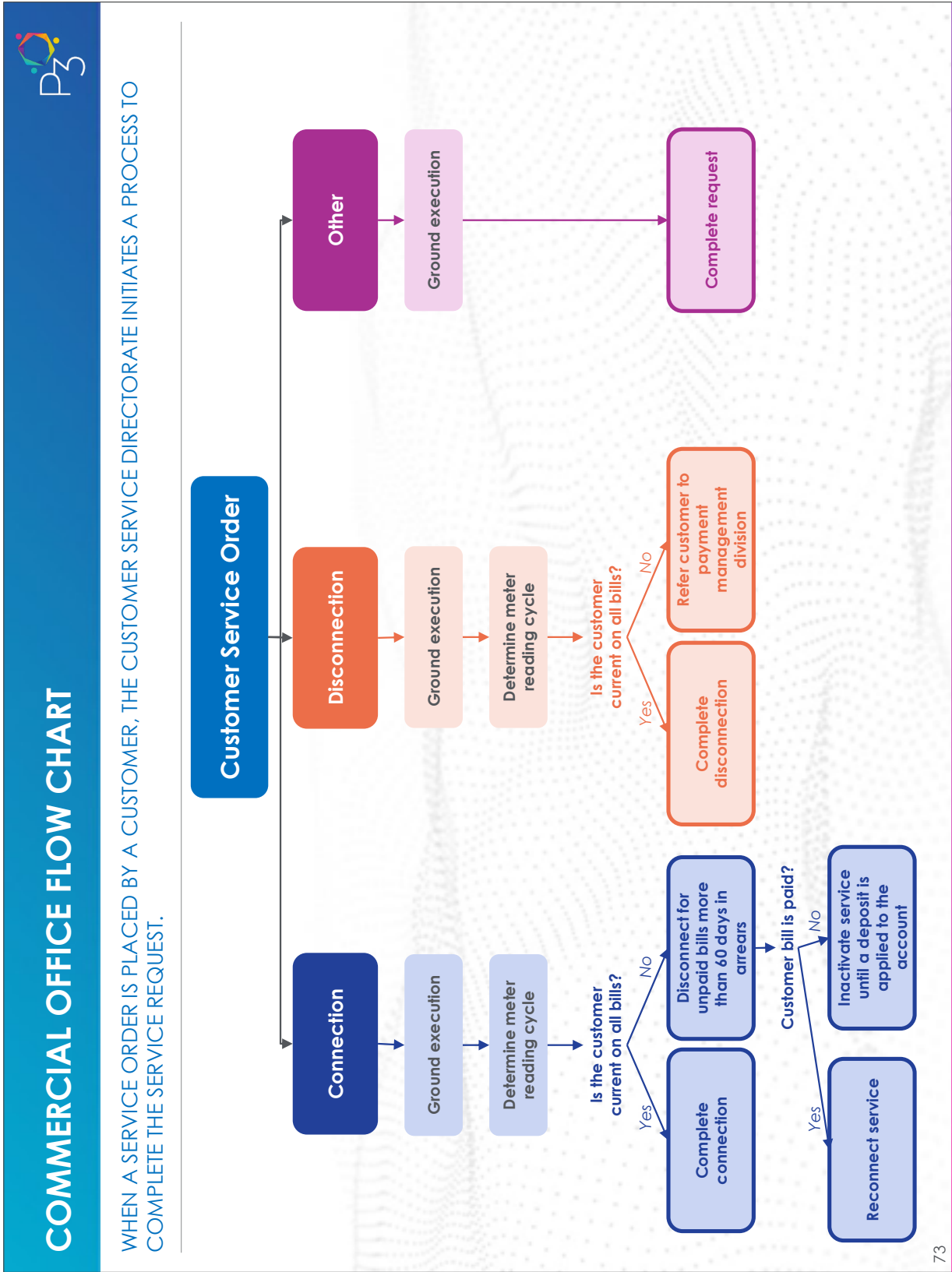


There have been **20,584 field operations performed** fiscal year-to-date





Exhibit E: PREPA Management Presentation







## CUSTOMER SERVICE CHALLENGES



### Key Customer Service Challenges

- Poor customer service largely stems from inadequate IT infrastructure, understaffing, and a lack of investment capital
  - The lack of quality IT infrastructure is the main challenge preventing better quality customer services
- Nearly all customer engagement is managed via an interactive voice response (“IVR”) system or at in-person district offices
  - IVR system is largely under-developed and rudimentary
  - Historical data is very limited as there is no data warehouse
  - Customer use of web portals is limited
- While current call volumes necessitate ~130 customer service representatives, PREPA only employs ~75 representatives
- The customer service linemen positions, which fulfill customer requests and other investigations in the field, are similarly understaffed
- Budgetary issues have made it difficult to solve challenges with the severely under-developed IT infrastructure and staffing levels
- To address some of the historical challenges, PREPA intends to employ third party customer service representatives in the first half of calendar 2019

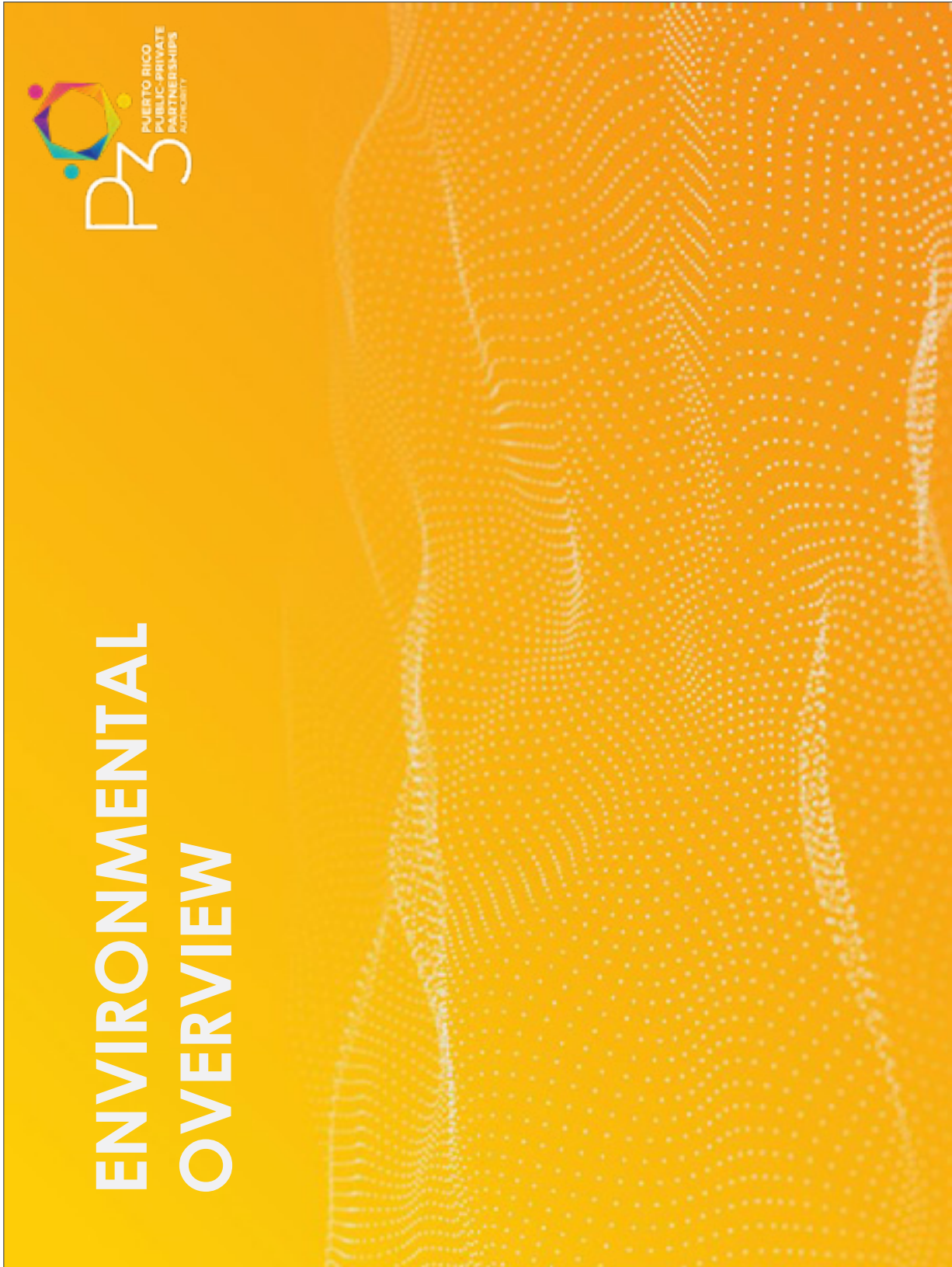








Exhibit E: PREPA Management Presentation







## ENVIRONMENTAL OVERVIEW



### Recent History of Environmental Regulation of PREPA's Generation

- In 1992, the U.S. EPA conducted an inspection of PREPA's baseload generators: Aguirre, Costa Sur, Palo Seco, and San Juan
  - Found the facilities were non-compliant principally with air emission, water discharge, and spill prevention standards
  - PREPA and the U.S. settled via a federal civil judicial Consent Decree in 1999, which remains in effect today
- The Consent Decree, as amended in 2004, required PREPA to pay a civil penalty and implement a program to ensure that PREPA returned to permanent, consistent compliance, including:
  - Implement an air compliance O&M program at its baseload units to meet opacity limits and performance measures
  - Implement a Clean Water Act compliance program to meet wastewater discharge limitations
  - Requires the payment of stipulated penalties for Consent Decree violations

### Consent Decree Required Mandatory Environmental Outages

- PREPA undertakes a mandatory environmental outage every 12 – 18 months at its baseload units, primarily for the purpose of cleaning the units' boilers
- Boilers and other key components are cleaned and recalibrated to meet the opacity standards of the Consent Decree
- Units are inspected for damage and worn components, which are repaired or replaced

### Following Hurricanes Irma and Maria, the EPA Granted a No-Action Assurance

- A No Action Assurance ("NAA") was granted to PREPA for certain Clean Air Act requirements
  - Originally issued on October 6, 2017, extended through July 31, 2018 for some (but not all) requirements
- The NAA provided assurances that the EPA would not enforce air violations related to Hurricanes Irma and Maria including those related to:
  - Emission limits and standards related to the sulfur content of the fuel
  - Heat input limits for limited-use units (San Juan, Palo Seco, Costa Sur)
  - Operating hour limits (San Juan, Cambalache, Mayaguez)
  - Equipment malfunctions, shutdowns, and restarts
  - Compliance with MATS
  - Shutdown or bypass of control equipment to shed parasitic load
  - Equipment malfunctions or inoperable processes
- The NAA also provided relief from all Clean Air Act reporting deadlines





## Exhibit E: PREPA Management Presentation

SUMMARY OF ENVIRONMENTAL REGULATIONS APPLICABLE TO PREPA - GENERAL	
Law / Regulation	Summary
<b>Mercury and Air Toxics Standards (MATS)</b>	<ul style="list-style-type: none"> <li>Finalized in February 2012 and effective April 2015 for 3 baseload facilities (San Juan, Palo Seco, and Costa Sur) and April 2016 for Aguirre</li> <li>Imposes emission limits, monitoring, and reporting obligations for mercury, acid gases, and particulate matter</li> <li>Requires compliance with work practice standards for startups / shutdowns and tune-ups</li> <li>"Technology-forcing" regulation with no allowance trading</li> </ul>
<b>National Ambient Air Quality Standards ("NAAQS")</b>	<ul style="list-style-type: none"> <li>Clean Air Act sets ambient air quality standards for criteria pollutants: ozone, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide, and lead</li> <li>Standards look at emissions contributions from all sources (e.g. stationary and mobile facilities), not just power generation</li> <li>In December 2017, the EPA and the Puerto Rico Environmental Quality Board updated designations for SO<sub>2</sub> based on air quality modeling</li> <li>The San Juan and Guayama Salinas areas have been determined to be in non-attainment for the 1-hour SO<sub>2</sub> ambient air quality standards ("nonattainment zones") due to the San Juan, Palo Seco, and Aguirre power stations               <ul style="list-style-type: none"> <li>By October 2019, Puerto Rico must finalize amendments to its State Implementation Plan requiring that PREPA takes measures to ensure that Puerto Rico's non-attainment zones are returned to attainment (to be achieved by 2023)</li> </ul> </li> </ul>
<b>Greenhouse Gas ("GHG") Emission Standards</b>	<ul style="list-style-type: none"> <li>The New Source Performance Standards ("NSPS") for Electric Utility Generating Units was finalized in October 2015 under Clean Air Act Section 111(b)</li> <li>Sets a rate limit of 1,000 lbs of CO<sub>2</sub> / MWh for combined cycle natural gas plants, and a limit of 1,400 lbs of CO<sub>2</sub> / MWh for coal plants</li> <li>Effectively prevents the permitting of new coal-fired power plants that are not equipped with CO<sub>2</sub> pollution control equipment</li> <li>In December 2018, the EPA issued a proposal to revise the Section 111(b) standards</li> <li>The EPA has also proposed Emissions Guidelines for Electric Generating Units under Section 111(d) to replace the Clean Power Plan</li> <li>Puerto Rico is currently excluded from the proposed Section 111(d) rule</li> </ul>
<b>Clean Water Act / Puerto Rico Water Quality Standards</b>	<ul style="list-style-type: none"> <li>Pursuant to Clean Water Act Section 316(b), the EPA promulgated final regulatory standards for cooling water intake structures, requiring covered facilities to obtain a National Pollutant Discharge Elimination System for Major Sources ("NPDES") permit</li> <li>The rule aims to reduce the impingement and entrapment of marine life from the impacts of water intake structures</li> <li>Under Sections 303(c) and 304(a) of the Clean Water Act, Puerto Rico publishes and maintains water quality standards regulations to protect, preserve, maintain, and enhance the quality of water in Puerto Rico compatible with the social and economic needs of the people of Puerto Rico</li> </ul>
<b>Renewable Portfolio Standards ("RPS")</b>	<ul style="list-style-type: none"> <li>Act 82-2010 (Puerto Rico) establishes and defines specific requirements to promote energy diversification by creating a RPS</li> <li>Requires PREPA to supply qualified renewable sources starting at 12% by 2015, 15% by 2017, 15% by 2027, and 20% by 2035, or purchase Renewable Energy Certificates ("RECs") to meet these goals               <ul style="list-style-type: none"> <li>PREPA currently purchases some RECs under renewable purchase agreements with wind and solar facilities for ~\$2 - \$4 / MWh</li> </ul> </li> <li>To date, PREPA has not met RPS targets</li> <li>Currently legislation under discussion in the Puerto Rico Legislature (Senate Bill No. 1121) could result in a RPS target of 20% from 2021 - 2025, 50% from 2026 - 2040, and 100% from 2041+</li> </ul>
<b>Energy RELIEF Plan (Energy Efficiency)</b>	<ul style="list-style-type: none"> <li>Act 57-2014 (Puerto Rico) requires PREPA to adopt Puerto Rico's RELIEF Plan</li> <li>The RELIEF Plan requires that by July 1, 2017, at least 60% of the electricity generated in Puerto Rico from fossil fuels be generated in a highly efficient manner (as to-be defined by the Energy Bureau)</li> <li>Act 57-2014 also includes specified energy consumption reduction targets for governmental entities</li> </ul>





Exhibit E: PREPA Management Presentation

SUMMARY OF ENVIRONMENTAL REGULATIONS APPLICABLE TO PREPA – T&D	
Law / Regulation	Summary
<b>1999 Consent Decree</b>	<ul style="list-style-type: none"> <li>The 1999 Consent Decree primarily applies to generation plants, and to the Monacillos Transmission Center</li> <li>Requires PREPA to develop Clean Water Act Spill Prevention, Control, and Countermeasure Plan ("SPCC") for Monacillos, and to certify that all underground storage tanks ("USTs") had been removed.</li> <li>PREPA has completed programs applicable to Monacillos</li> </ul>
<b>Toxic Substances Control Act ("TSCA"); Polychlorinated Biphenyl ("PCB") Program</b>	<ul style="list-style-type: none"> <li>Electrical equipment (e.g., transformers) are regulated under TSCA</li> <li>Requirements govern storage, disposal, spills, marking, and recordkeeping of transformers</li> <li>1991 Consent Agreement with EPA requires PREPA to implement a 10-year program to sample and test all oil-filled transformers in its system for PCB content of 50 ppm or more</li> <li>PREPA initiated a program to properly dispose of transformers with high PCB content</li> <li>PREPA's system has more than 120,000 transformers</li> <li>PREPA sampled transformers for ten years, and in 2005, EPA acknowledged that PREPA had complied with the sampling requirements</li> <li>PREPA properly disposed of many transformers with &gt;500 ppm PCBs and many transformers with 50 to 499 ppm PCBs</li> <li>PREPA has experienced transformer-related spills, which it has addressed</li> <li>PREPA also received orders from EQB to dispose of certain transformers in the aftermath of the hurricanes</li> </ul>
<b>Asbestos and Lead-Based Paint Mitigation</b>	<ul style="list-style-type: none"> <li>When construction, renovation, or demolition occur at a facility, sampling for asbestos and lead paint is performed</li> <li>Contractors are hired to perform asbestos and lead paint handling work</li> <li>Must obtain permits, follow handling requirements, and report to EQB, among other things</li> </ul>
<b>Resource Conservation and Recovery Act ("RCRA"); Hazardous Waste Management</b>	<ul style="list-style-type: none"> <li>Various PREPA facilities, including regional offices, technical offices, and mechanical shops, are regulated as hazardous waste generators and have obtained a RCRA ID Number from EPA</li> <li>Most facilities are Very Small Quantity Generators, subject to limited requirements, while several are Small Quantity Generators, subject to additional hazardous waste handling requirements</li> <li>PREPA facilities also are small quantity handlers of universal wastes (e.g., lamps, batteries)</li> </ul>
<b>Regulations for the Control of Underground Storage Tanks ("USTs")</b>	<ul style="list-style-type: none"> <li>PREPA has 37 USTs at 19 facilities, primarily located at technical district mechanical workshops</li> <li>Permits are required to install, operate, or close a UST; operators must be trained and certified; and various management, inspection, equipment, and testing requirements must be followed</li> <li>PREPA has received several notices of violation for its USTs in the last few years—primarily related to inspections and testing                             <ul style="list-style-type: none"> <li>The NOV's are resolved or are being resolved</li> </ul> </li> </ul>





Exhibit E: PREPA Management Presentation

SUMMARY OF ENVIRONMENTAL REGULATIONS APPLICABLE TO PREPA – T&D	
Law / Regulation	Summary
<b>Used Oil Regulation</b>	<ul style="list-style-type: none"> <li>EQB has regulations governing the generation, collection, storage, transportation, and disposal of used oil</li> <li>PREPA facilities generate, store, and collect oil, but PREPA does not itself transport used oil for disposal</li> <li>Various PREPA facilities have used oil generator identification numbers and permits for used oil storage, and must comply with various management and manifesting requirements</li> </ul>
<b>Biomedical Waste</b>	<ul style="list-style-type: none"> <li>EQB has regulations governing the generation, handling, transportation, and disposition of biomedical waste</li> <li>PREPA has biomedical waste generator identification numbers for six of its facilities that have medical dispensaries and first aid, including for the Monacillos and the NEOS buildings</li> <li>PREPA maintains a biomedical waste management plan, performs training, and hires a contractor to dispose of waste</li> </ul>
<b>Emergency Planning and Community Right-to-Know Act</b>	<ul style="list-style-type: none"> <li>PREPA's non-generation facilities -- including its mechanical shops and the NEOS building -- must file Tier II reports under EPCRA</li> </ul>
<b>Spill Prevention, Control, and Countermeasure ("SPCC") Program</b>	<ul style="list-style-type: none"> <li>Section 311 of the Clean Water Act imposes requirements for prevention, preparedness, and response to oil discharges</li> <li>Requires preparation and updating SPCC Plans for many of its facilities, including transmission and distribution substations, technical districts, and others                             <ul style="list-style-type: none"> <li>PREPA is behind schedule for on updating some of its plans, which must be updated every 5 years</li> </ul> </li> <li>PREPA has completed the required construction of secondary containment at many substations, but installation of secondary containment infrastructure is ongoing</li> </ul>
<b>Underground Injection Control ("UIC") Regulations</b>	<ul style="list-style-type: none"> <li>PREPA has UIC facilities for the disposal of sanitary waste at many of its non-generation facilities that are regulated under EQB's Underground Injection Control regulations</li> <li>Generally, requires either a permit to operate the UIC facility or implement a compliance plan to close the UIC</li> <li>Given the large number of PREPA UIC facilities, PREPA has been developing compliance plans in a stepwise fashion</li> <li>PREPA has a two-phase plan to comply:                             <ul style="list-style-type: none"> <li>The 1st phase is to prepare and implement compliance plans for generation stations</li> <li>The 2nd phase is to prepare compliance plans for non-generation facilities</li> </ul> </li> <li>Some operating permits and alternative compliance plans have been implemented at non-generation facilities, but permits/plans still need to be obtained/approved for many facilities</li> </ul>





Exhibit E: PREPA Management Presentation

SUMMARY OF ENVIRONMENTAL REGULATIONS APPLICABLE TO PREPA – T&D	
Law / Regulation	Summary
<b>Emergency Generators</b>	<ul style="list-style-type: none"> <li>PREPA has permits for emergency generators at a number of its non-generation facilities, which must be renewed every five years</li> </ul>
<b>Corporate Recycling Program</b>	<ul style="list-style-type: none"> <li>PREPA must comply with the Law of Reduction, Reuse, and Recycling of Solid Waste in Puerto Rico</li> <li>PREPA maintains a Corporate Recycling Plan, which has been certified by Puerto Rico Solid Waste Authority ("SWA")</li> <li>PREPA is in compliance with the current 35% recycling requirement</li> </ul>
<b>Noise Pollution Control Regulation</b>	<ul style="list-style-type: none"> <li>PREPA must respond to noise complaints by performing noise studies where required</li> <li>There have not been complaints or noise studies performed in the last several years</li> </ul>
<b>Light Pollution Control Regulation</b>	<ul style="list-style-type: none"> <li>PREPA must comply with Puerto Rico's Light Pollution Control and Prevention Program Law</li> <li>Establishes standards for lighting and adopts a transition period for lighting</li> <li>For existing public luminaries there is a 20-year transition period, except for luminaries in special environmental and undeveloped areas (including beaches used as turtle habitat), there is a 10-year transition period</li> <li>PREPA expects to receive turtle friendly luminaries in 2019</li> </ul>
<b>Waste Tire Regulation</b>	<ul style="list-style-type: none"> <li>PREPA must comply with the Regulations for the Proper Handling of Tires</li> <li>Various PREPA non-generation facilities have obtained a registration number as a generator of discarded tires</li> <li>PREPA prepares a manifest to track the disposal of tires and reports on discarded tires</li> </ul>
<b>Clean Water Act Pesticide General Permits for Irrigation Systems</b>	<ul style="list-style-type: none"> <li>PREPA's Costa Sur, Isabela, and Valle de Lajas Irrigation Districts are authorized to discharge to waters of the United States in accordance with the 2016 Pesticide General Permit for Discharges from the Application of Pesticides</li> <li>PREPA must prepare Pesticide Discharge Management Plans and submit annual reports, among other things</li> </ul>
<b>Special Use Permits for Telecommunications Stations</b>	<ul style="list-style-type: none"> <li>PREPA has special use permits from various state and federal agencies to locate and operate forest-based telecommunications towers, including permits from the Department of Natural and Environmental Resources, the U.S. Forest Service, and the U.S. Army</li> </ul>





# CONSENT DECREE NEGOTIATIONS

## Scope and Burden

### 1999 Consent Decree

- Covers 5 separate environmental statutes
  - Clean Air Act: 10 separate compliance programs
  - Clean Water Act: National Pollutant Discharge Elimination System and Spill Prevention, Control, and Countermeasure programs
  - Emergency Planning and Community Right-to-Know Act
  - Comprehensive Environmental Response, Compensation, and Liability Act
  - Resource Conservation and Recovery Act
- Perform environmental projects, including a land acquisition project
- Outlines requirements for mandatory environmental outages at subject units
- Stipulates civil penalties for future violations

### 2004 Modification to the Consent Decree

- In 2004, the Consent Decree was amended to include additional requirements and civil penalties
  - \$300,000 of new penalties for recurring opacity-related violations and higher stipulated penalties for opacity violations
  - Stricter sulfur content requirements for fuel
  - Diesel fuel required for start-up
  - New NO<sub>x</sub> reduction program at Palo Seco, Aguirre, and Costa Sur, with required quarterly reporting
  - Additional \$100,000 to land acquisition and supplemental environmental projects

## Consent Decree Negotiations

### Status of Recent Negotiations

- In May 2015, PREPA initiated negotiations on terminating or modifying the Consent Decree
  - PREPA has completed many of the programs required by the Consent Decree, yet all obligations remain in effect pending modification
- Following several rounds of negotiations, PREPA and the EPA have informally agreed to:
  - Terminate:
    - 6 of 10 of the Clean Air Act compliance programs
    - All Clean Water Act and other non-Clean Air Act programs
  - Environmental Review Contractor
  - Additional environmental projects, except the land acquisition project
- Streamline and simplify:
  - Reporting requirements
  - Optimization program
  - Continuous monitoring program
  - Fuel quality program
  - Operations and preventative maintenance program
  - Electronic reporting and payment of stipulated penalties
  - Time period for terminating the Independent Air Compliance Auditor Program
- PREPA delivered its last proposal to the EPA in October 2018
- PREPA received the EPA's counterproposal on November 29, 2018

*PREPA expects to reach an agreement on a Consent Decree Modification by the end of 2019*





## ENVIRONMENTAL COMPLIANCE AND RECENT UPGRADES



### Environmental Compliance Strategy

#### MATS

- MATS compliance strategy is expected to rely on new generation, fuel conversion of key generators, and retirement / reduced output at other plants
  - Retire old, non-compliant generation units as renewable and new conventional capacity comes online
  - Reduce output of oil-fired steam generation units to qualify as limited-use liquid oil-fired resources
    - To qualify, units must operate below the threshold of 8% heat input capacity factor averaged over a 24 month block period
- Under this strategy, PREPA expects a final IRP that is fully MATS compliant
- Negotiations with the EPA regarding the Consent Decree will resume once the IRP process is complete

#### Clean Water Act Section 316(b)

- In order to comply, PREPA will replace the cooling water intake screens at all applicable facilities with improved traveling screens
  - These screens loop in an elliptical, allowing trapped marine to escape through an outflow channel, limiting marine life loss
- A pilot study is currently underway at Costa Sur, the results of which will be applied to the remaining facilities
- Funding has been secured through the EPA

### Recent Environmental Upgrades

- **FY 2006:** completed fuel upgrades at Palo Seco, San Juan, Aguirre, and Costa Sur such that fuel sulfur content does not exceed 0.5% by weight
- **FY 2007:** completed projects to reduce NOx emissions at Palo Seco, San Juan, Aguirre, and Costa Sur
- **FY 2011 – 2012:** Costa Sur Units 5 and 6 converted to dual fuel (natural gas and residual oil), with modifications to support continued full load operation with all-gas firing
- **FY 2011:** completed installation of signage and spill response material at all substations
- **FY 2013 – 2015:** completed construction of compliance containment at all substations that needed to be upgraded
- **FY 2013:** performed environmental protection and remediation at each major generating station
- **FY 2014:** funded section 316(a) and (b) Clean Water Act projects at Costa Sur relating to mitigation of the cooling water intake and discharge systems
  - In FY 2012 completed the rehabilitation of Costa Sur's outflow channel walls
  - Total upgrade projects are expected to be completed in FY 2020
- **FY 2018:** replaced the water treatment system at San Juan





Exhibit E: PREPA Management Presentation

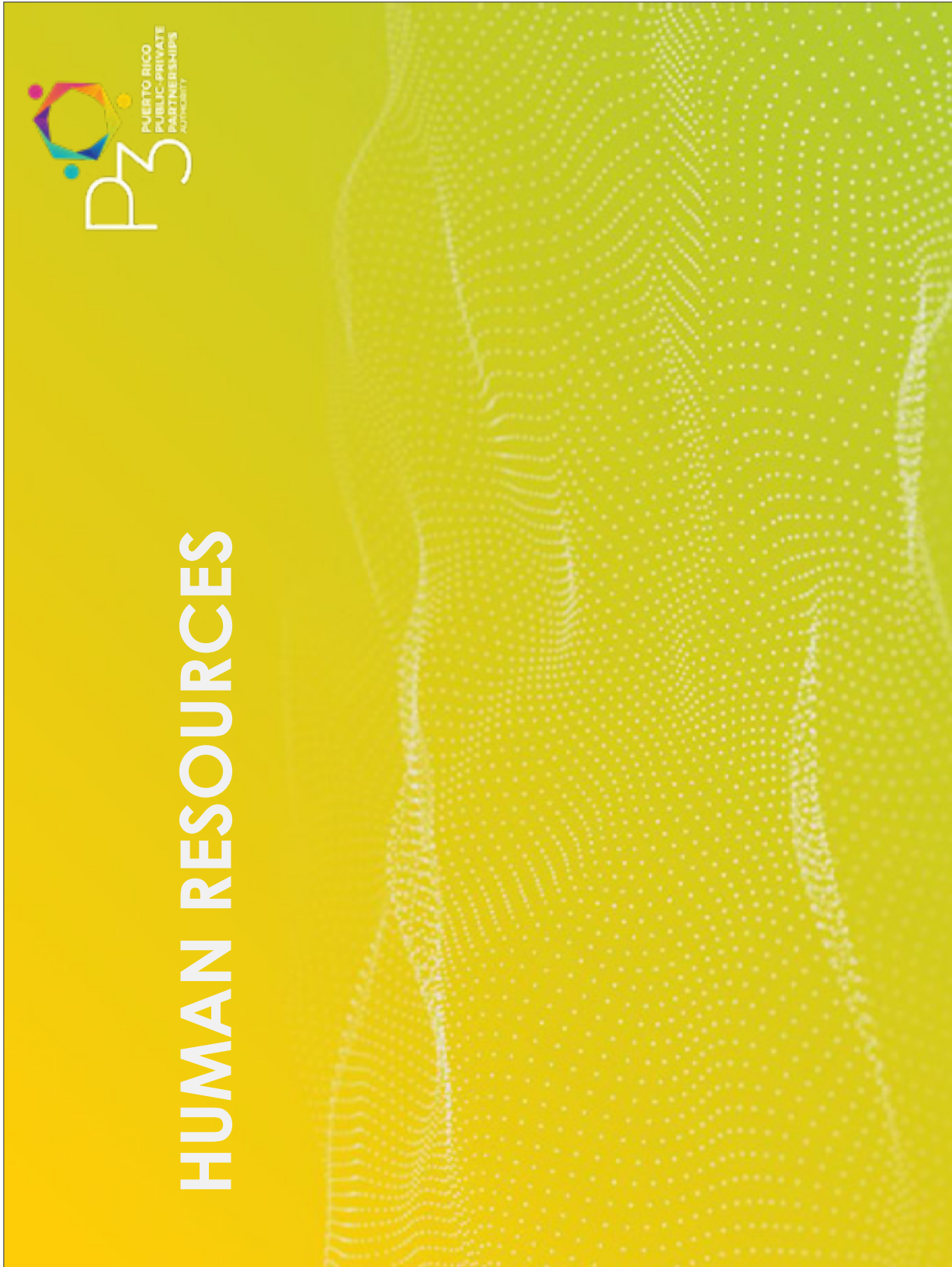
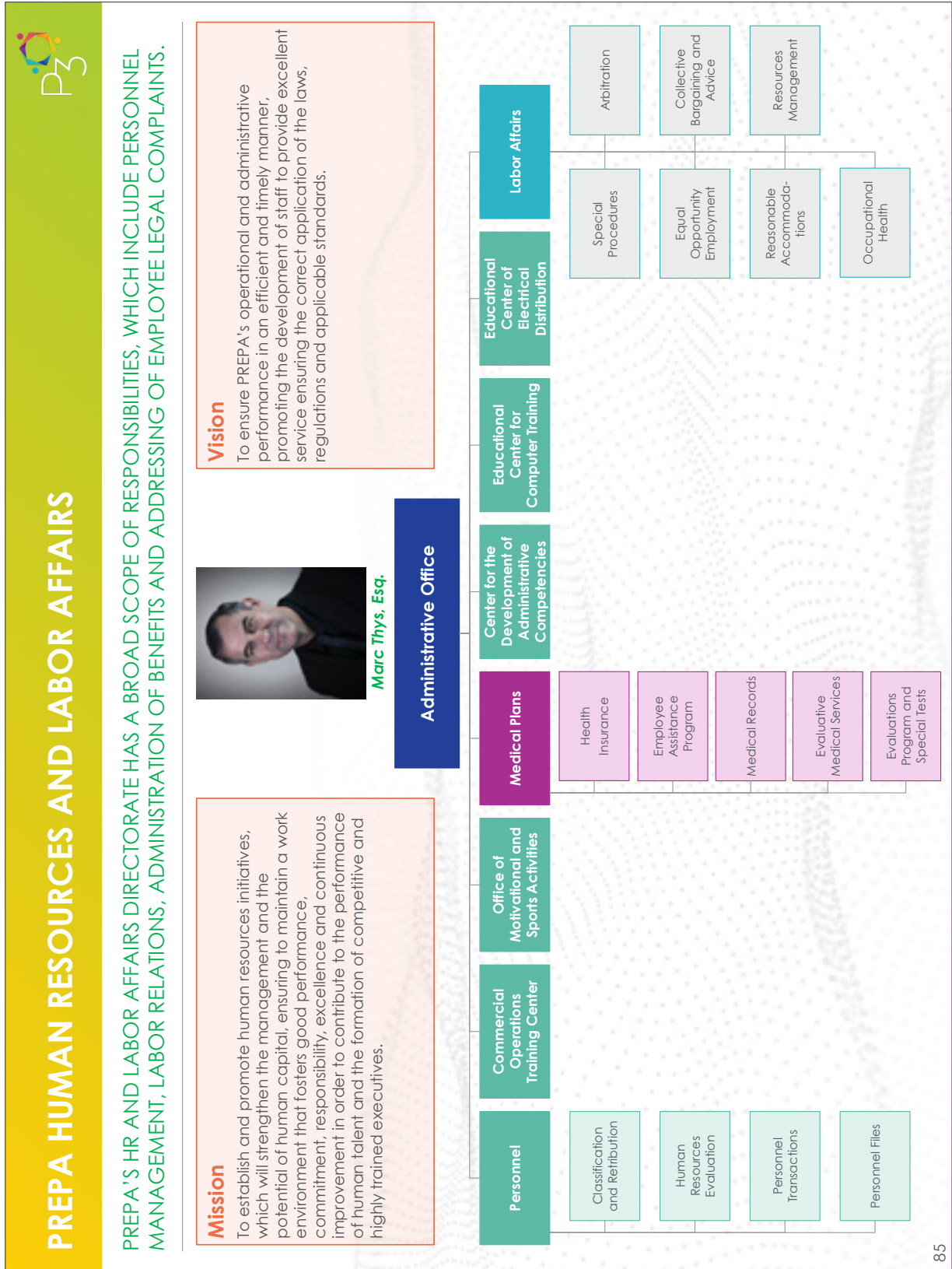






Exhibit E: PREPA Management Presentation







## LABOR RELATIONS DIVISION



THE LABOR RELATIONS DIVISION ADMINISTERS PREPA'S LABOR POLICY. IT OFFERS ADVICE ON COLLECTIVE AGREEMENTS AND ADMINISTRATIVE REGULATIONS THAT AFFECT EMPLOYER-EMPLOYEE RELATIONS. IT ALSO DEALS WITH AND RESOLVES DISPUTES AND CONFLICTS THAT ARISE IN THE DIFFERENT WORKING AREAS, AND OVERSEES THE INSTITUTIONAL DISCIPLINE OF THE AGENCY.

### Division Offices

- **Special Procedures Subdivision** – group of in-house lawyers in charge of working with the complaints and disciplinary cases regarding PREPA employees. These lawyers represent PREPA in the cases described above, both in administrative and judicial forums
- **Reasonable Accommodation Office** – is responsible for ensuring faithful compliance with the provisions of Federal Law 101-336 of July 26, 1990, known as the American with Disabilities Act, and considering the amendments of 2008, in what is known today as ADA
- **Collective Bargaining and Advice Department** – is a support unit that deals with all aspects related to employer-employee relations in PREPA. The main functions of this department are to provide advice to the management personnel of PREPA on laws, rules, administrative procedures and provisions of the collective bargaining agreements with the different appropriate unions existing in PREPA. In addition, this department's officers continually move to the different working areas of PREPA to resolve employer-employee conflicts that arise
- **Arbitration Department** – this department, through the complaint resolution procedures contemplated in the different collective agreements, and the procedures for the resolution of complaints of non-unionized employee bargaining, works in the solution of complaints filed in the Labor and Human Resources Department
- **Equal Employment Opportunity Office** – is responsible for ensuring equal employment opportunities for both employees and applicants. Formulates, administers and discloses affirmative action plans for equal opportunities in the employment of the company, in accordance with State and Federal laws. It is the administrative conciliatory forum in PREPA to investigate and solve the complaints filed by employees, related to discrimination in employment due to violation of the Federal and State anti-discrimination laws
- **Resources Management Office** – is based on compliance with the law on compensation for work accidents, Act No. 45 of April 18, 1935, that obliges the employer to offer every employee who suffers an accident at work or an occupational disease, a treatment for rehabilitation. The office is responsible for complying with the filing of all accidents and occupational diseases in the company. In addition, the office ensures that the employee receives an excellent service and that the treatment prescribed for the rehabilitation is complied with





Exhibit E: PREPA Management Presentation

## PERSONNEL DIVISION



THE PERSONNEL DIVISION IS RESPONSIBLE FOR THE ADMINISTRATION OF PREPA'S HUMAN RESOURCES, WHICH IS GOVERNED BY LAWS, REGULATIONS, AND PROCEDURES IN ACCORDANCE WITH THE ESSENTIAL AREAS AT PRINCIPLES OF MERIT. THIS INCLUDES RECRUITMENT, SELECTION, JOB CLASSIFICATION, JOB RETENTION, TRANSFERS, PROMOTIONS, DEMOTIONS AND TRAININGS.

### Division Offices

- **Personnel Transactions Department** – is responsible for processing all appointments and changes, related to all PREPA employees. It also analyzes and publishes all vacant positions according to the administrative manual, regulations and the different collective bargaining agreements. In the area of recruitment, the department evaluates and refers candidates for employment, and ensures that they meet all the established requirements. Finally, the staff and mail files area is responsible for safeguarding the corporate files and providing the information that may be required
- **Human Resources Evaluation Department** – the main task is to provide PREPA with a reliable evaluation program for the selection of the best human resources available. Through the process of evaluation and administration of tests or interviews, the department can identify the skills and abilities of a job candidate or employee. The department is made of two sections: the Exams Section and the Test Development Section
- **Classification and Retribution Department** – is the evaluation of reclassification requests, changes of payment groups, transfers, location changes, evaluations of corporate employee records and evaluations of reinstallation of trust employees. Our staff serves as experts in cases related to the personnel transactions mentioned above. It also evaluates the monetary compensations and pay scales of all PREPA positions





Exhibit E: PREPA Management Presentation

## OCCUPATIONAL HEALTH DIVISION



THE OCCUPATIONAL HEALTH DIVISION MANAGES AND PROMOTES PROGRAMS REGULATED UNDER FEDERAL AND STATE LAWS, IN ORDER TO ACHIEVE A NO RISK HEALTH ENVIRONMENT.

### Division Offices

- **Department of Health Preservation Programs and Occupational Medical Evaluations**
  - **Health Insurance Section** – is responsible for offering information and giving guidance to active and inactive employees, related to all Health Insurance issues
  - **Employee Assistance Program and Psychological Evaluations Section** – develops and implements programs aimed at offering psychosocial services to PREPA employees with problems that affect their work performance and personal life
  - **Medical Records and Image System Section** – is responsible for the custody of the medical records of all PREPA employees
  - **Health Prevention and Primary Health Help Section** – has the main objective of providing health assistance and prevention of health conditions in PREPA employees, by having outstanding nursing staff in the different power generation stations and technical areas
  - **Evaluative Medical Services Section** – by means of PREPA Medical Consultant, this section is in charge of the evaluation of the physical and emotional capacity of candidates for employment, active employees and possible disabled employees, to perform their duties
- **Evaluations Program and Special Tests Section ("PEPE")**
  - Guidance on Act No. 78
  - Identification and detection of the use of controlled substances, through specialized tests
  - Dissuade the use of controlled substances, and guidance on the legal aspects concerning this subject





Exhibit E: PREPA Management Presentation

## EMPLOYEE DEVELOPMENT PROGRAM



PREPA OFFERS A RANGES OF COURSES IN FIVE DEPARTMENTS TO PROMOTE THE DEVELOPMENT OF COMPETENCIES AND THE TRAINING OF PERSONNEL.

Departments	Representative Courses	Includes Safety Briefings and Courses?
<b>Educational Center of Electrical Distribution ("CADE")</b> (149 courses offered)	<ul style="list-style-type: none"> <li>Electric Systems, Techniques for Ascending Electric Poles, Operations on Energized Lines in the Distribution System</li> </ul>	✓
<b>Center for the Development of Administrative Competencies ("CDCA")</b> (84 courses offered)	<ul style="list-style-type: none"> <li>Cultural Diversity and Discrimination in Employment, Guidance on the Recording of Occupational Injuries and Diseases (OSHA 200), Pensions and Benefits of the Retirement System</li> </ul>	✓
<b>Educational Center for Computer Training ("CECI")</b> (24 courses offered)	<ul style="list-style-type: none"> <li>Microsoft Excel, Kronos, Oracle</li> </ul>	✓
<b>Commercial Operations Training Center ("CAOC")</b> (38 courses offered)	<ul style="list-style-type: none"> <li>Commercial operations: Customer Service Supervisor, Customer Service Representative by Phone, Mechanized Collector Systems</li> <li>Technical courses: Special Counters, Researcher of Consumption Irregularities, Overdue Account Collections</li> <li>Special courses: Electricity, Net Metering, Laws and Regulations, Misuse of Electric Power</li> <li>Other: Mathematics for Electricity, Energy Meters, Secondary Underground Systems</li> </ul>	✓
<b>Electrical System Training Center ("CASE")</b> (119 courses offered with 10 accreditations, e.g. equipment operator)	<ul style="list-style-type: none"> <li>Theory and Practical Skills for Generation Operators, Advanced Techniques and Skills for Combined Cycle Operators, Laws and Regulations that Control Air Quality</li> </ul>	✓







Exhibit E: PREPA Management Presentation

## LINEMAN TECHNICAL CERTIFICATION CURRICULUM



THE LINEMAN CERTIFICATION PROCESS TAKES ~128 DAYS TO COMPLETE (~6.5 MONTHS), WITH 247.5 HOURS OF CLASSROOM WORK AND 705 HOURS APPLIED LAB WORK.

Program Levels	Courses Offered	Classroom Hours	Lab / Applied Hours	Select Representative Courses
100-Level Courses	 (8 Courses)	<ul style="list-style-type: none"> <li>157.5 hours</li> </ul>	<ul style="list-style-type: none"> <li>0 hours</li> </ul>	<ul style="list-style-type: none"> <li>Fundamentals of Mathematics</li> <li>Fundamentals of Electricity</li> <li>Introduction to the Technical Areas of PREPA</li> <li>Fundamentals of the Electric System</li> <li>Basics of Aerial Construction</li> </ul>
200-Level Courses	 (6 Courses)	<ul style="list-style-type: none"> <li>30 hours</li> </ul>	<ul style="list-style-type: none"> <li>270 hours</li> </ul>	<ul style="list-style-type: none"> <li>Loop and Knot Techniques for Technicians and Linemen</li> <li>Development of Mechanical Skills</li> <li>Use of Compression Connectors and Related Tools</li> <li>Techniques for Ascending / Descending Poles with Spurs (Both 30 foot and 60 foot poles)</li> <li>Rescue Techniques From Poles and Basket Trucks</li> </ul>
Advanced Courses (300-Level and Above)	 (10 Courses)	<ul style="list-style-type: none"> <li>60 hours</li> </ul>	<ul style="list-style-type: none"> <li>105 hours</li> </ul>	<ul style="list-style-type: none"> <li>Use and Handling of Basket Trucks</li> <li>Basic Principles of Cutting and Pruning</li> <li>Operation and Maintenance of Public Lighting</li> <li>Basic Principles of Distribution Transformers</li> <li>CPR and First Aid</li> </ul>
Advanced Workshops	 (3 Courses)	<ul style="list-style-type: none"> <li>0 hours</li> </ul>	<ul style="list-style-type: none"> <li>330 hours</li> </ul>	<ul style="list-style-type: none"> <li>Operation and Maintenance of Energized Lines</li> <li>Construction of Aerial Distribution Lines</li> <li>Construction of Aerial Transmission Lines</li> </ul>





Exhibit E: PREPA Management Presentation

## PREPA WORKFORCE OVERVIEW

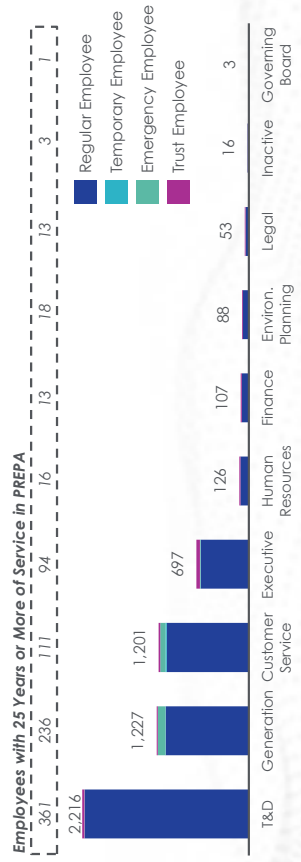
PREPA EMPLOYS A LARGE WORKFORCE OF KEY PERSONNEL WITH VALUABLE EXPERIENCE THAT CAN BE LEVERAGED BY A POTENTIAL PRIVATE PARTY.

### Workforce Overview

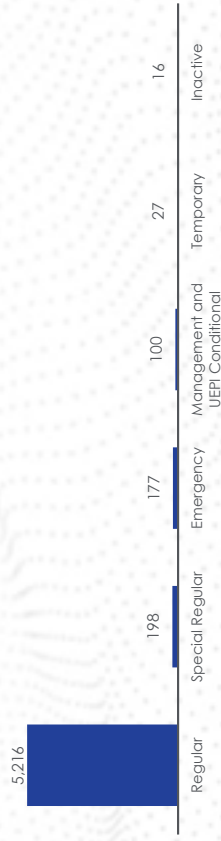
- PREPA employs a total of 5,734 employees across multiple directorates and four different unions as of January 2019
- PREPA workforce is ~72% unionized, with the majority of unionized employees being members of UTIER
  - The collective bargaining agreements ("CBAs") with each of the unions remain in effect under an evergreen clause
  - The CBAs tend to be restrictive and constrain the manner in which PREPA can efficiently manage and deploy its human resources
- PREPA's total career employees are 1,456
- In addition to the labor unions, PREPA has ~171 "trust" positions
  - These are positions directly appointed and approved PREPA's CEO and Board of Directors
  - In general, all directorships (e.g. directorate heads, high-level management, etc.) are "trust" positions
  - Historically, a political shift in the local government resulted in a change to the CEO, and the majority of the "trust" employees
    - In these times, most "trust" employees revert to former staff positions, rather than leave PREPA entirely
  - The changing of trust employees tended to create inefficiencies and continuity challenges
  - The use of "trust" positions is practiced across many public corporations in Puerto Rico; it is not unique to PREPA
  - There has been an attempt to depoliticize executive-level positions; Act 4-2016 prohibits executive-level employees from participating in political activities
- PREPA is understaffed in certain highly skilled functions, partially due to a wave of retirements in 2017 and 2018
  - 514 and 422 PREPA employees retired in 2017 and 2018 respectively
  - Limited ability to replace talent has exacerbated the shortage of skilled labor

91 Note: Reflects staffing levels as of January 2019.

### Employees By Directorate



### Employees by Classification



### Employees by Proper Unit

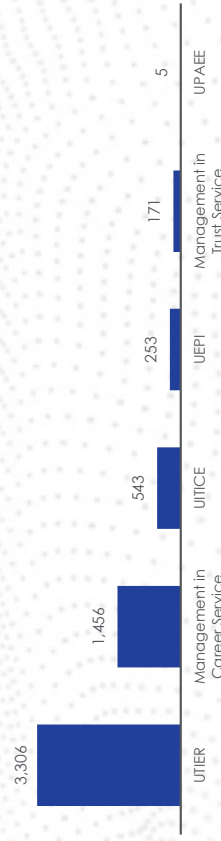






Exhibit E: PREPA Management Presentation

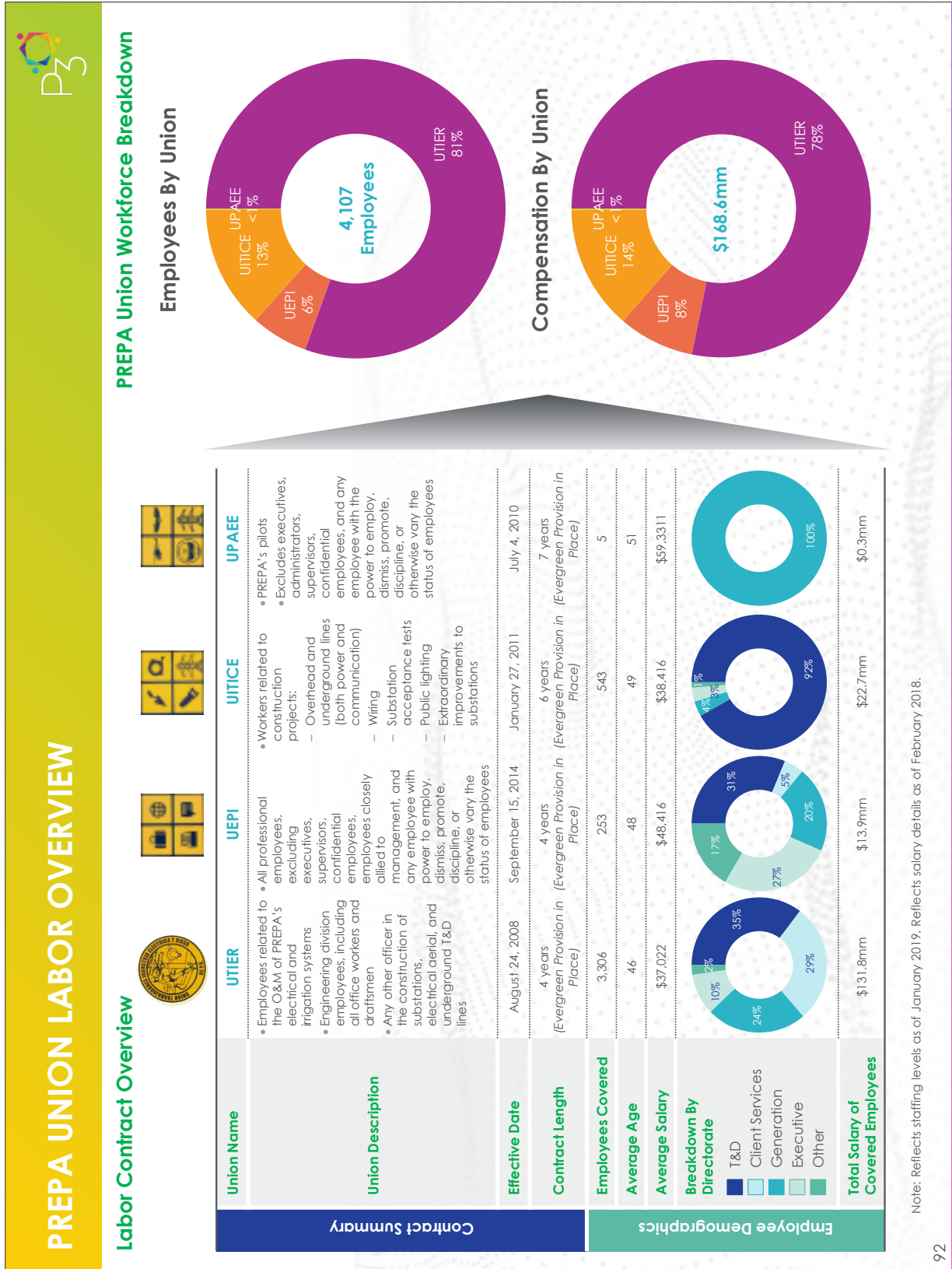




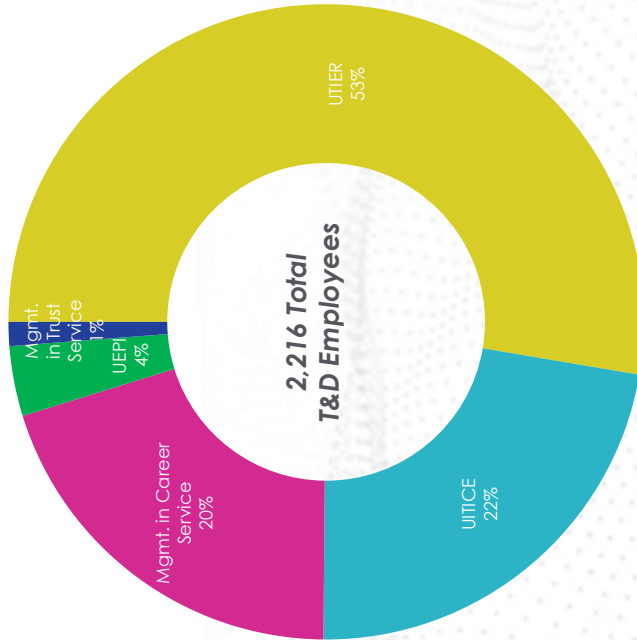


Exhibit E: PREPA Management Presentation

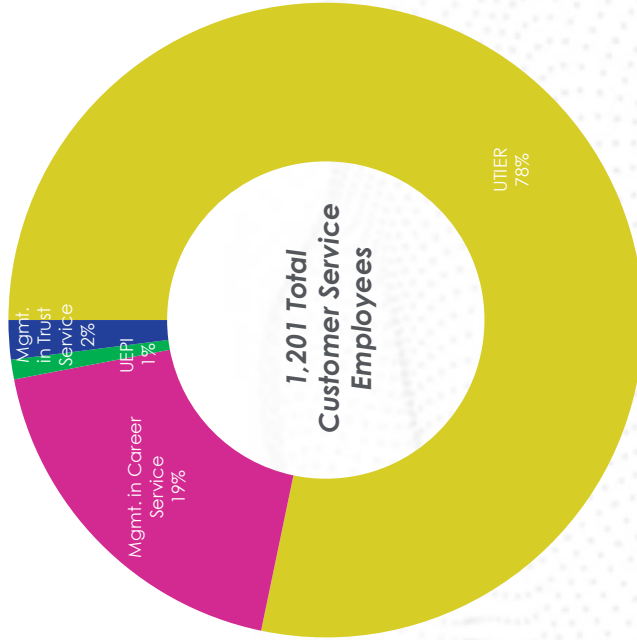
## PREPA UNION LABOR OVERVIEW (CONT'D)



**T&D Employees by Proper Unit**



**Customer Service Employees by Proper Unit**



Proper Unit	T&D Directorate	Customer Service Directorate
Mgmt. in Career Service	445	225
Mgmt. in Trust Service	27	24
UTIER	1,167	940
UTICE	498	0
UEPI	79	12
<b>Total Employees</b>	<b>2,216</b>	<b>1,201</b>

Note: Reflects staffing levels as of January 2019.





Exhibit E: PREPA Management Presentation

## RECENT HEADCOUNT DECLINE

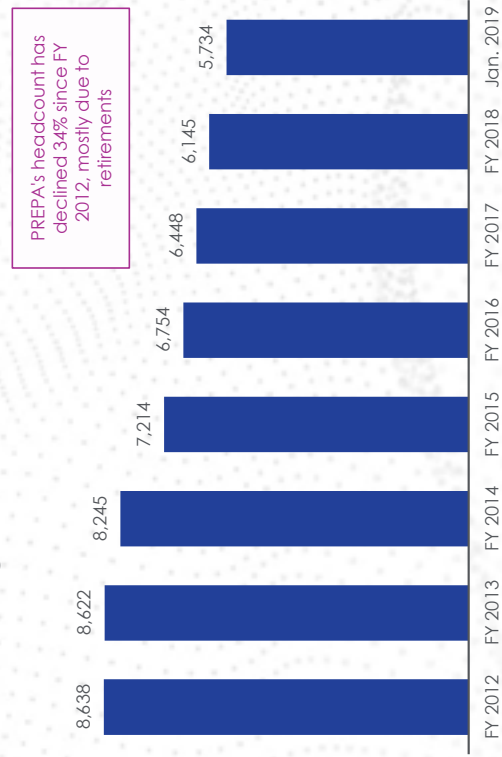


PREPA'S RECORDS INDICATE THAT THE UTILITY'S STAFFING HAS DECLINED RELATIVE TO HISTORIC LEVELS. IT WILL BE CRITICAL FOR THE PRIVATE PARTY TO QUICKLY DETERMINE AND IMPLEMENT PROPER STAFFING LEVELS AT THE UTILITY.

### Labor Shortfall Overview

- PREPA staffing levels have declined over the years, particularly in the Generation, T&D, Customer Service, and IT Directorates
- In August 2017, prior to Hurricanes Irma and Maria, directorate heads across PREPA requested the addition of an aggregate 1,017 skilled employees
- The staffing ramp-up will be dependent on a variety of factors:
  - Identifying candidates with highly-specialized skill sets
  - Identifying the scope of need for human resources
  - Impact of sector transformation
  - Unpredictable retirement patterns
- 514 PREPA employees retired in 2017, 422 retired in 2018, and 18 as of January 2019<sup>1</sup>
- Employees can elect to halt the retirement process after submitting paperwork, leading many to initiate the retirement process well in advance of the target date

### Annual Average Employee Headcount



1. Figures reflect retirements and terminations.

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### Employee Retirements from 2012 – 2017

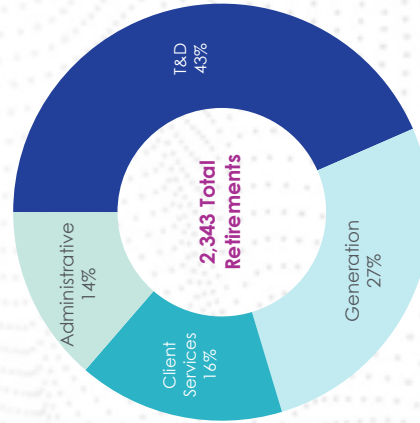






Exhibit E: PREPA Management Presentation

## PREPA LABOR SHORTFALL

### Breakdown of Labor Requests

Directorate Requests for Supplementing Headcount, as of August 2017

#### Current Headcount by Directorate vs. 2017 Position Requests

Directorate	Headcount as of January 2019	Total Positions Requested in 2017
Generation	1,227	386
Transmission and Distribution	2,216	336
Customer Service	1,201	229
Executive and General Administration	697	66
Human Resources	126	0
Finance	107	0
Planning and Environmental Protection	88	0
Legal	53	0
Governance Board	3	0
Inactive	16	0
<b>Total</b>	<b>5,734</b>	<b>1,017</b>

Targeted areas for re-engineering and business process outsourcing

*In mid-2018, PREPA hired a local consultancy group to establish a labor capacity assessment. This assessment will evaluate key areas of labor shortfall and surplus, and will provide a roadmap to overcoming staffing challenges. This analysis is ongoing, and is expected to be completed in segments over the course of 2019*



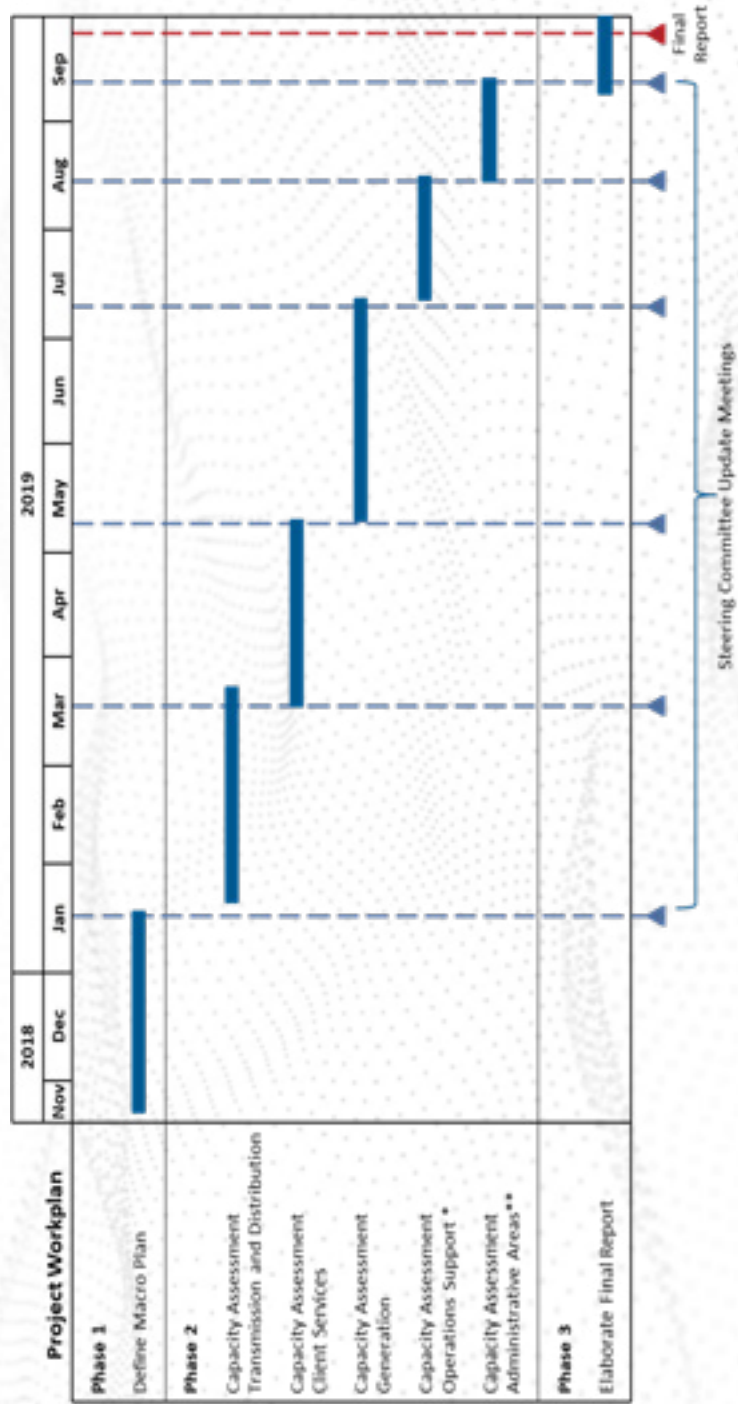


## LABOR CAPACITY ASSESSMENT OVERVIEW



### Problem Statement and Expected Engagement Impact

- **What is the appropriate number of people and other resources within PREPA to fulfill its mission?**
  - Determine if PREPA has an adequate number of employees to fulfill its stated mission and objectives given their current organization and processes
  - Examine the levels of demand for services, including consumer-centric operational and client service activities, using available workload data
  - Understand operational deployment practices; shift scheduling, staffing levels per shift, and other "leave" factors that affect staffing availability (e.g. days off, sick leave, training, among others)
  - Review current organizational structure, taking into account supervisory workload, and its implications for staffing
  - Identify and provide high-level efficiency recommendations to be implemented by PREPA
  - Recommend a tool, system of analysis, and / or methodology that can be used by PREPA








<div>  <h2>EMPLOYEE PENSIONS &amp; RETIREMENT – SELECTED BENEFIT PROVISIONS</h2> </div>	
Summary of Selected Benefit Provisions	
Participation	<ul style="list-style-type: none"> <li>All employees participate. Each member participates under an optional regimen of benefits supplementary to or coordinated with Social Security. All members hired after September 30, 1990 can only participate in the supplementary scheme</li> </ul>
Compensation	<ul style="list-style-type: none"> <li>Average of the three highest annual base salaries. For new members hired on or after January 1, 1993, annual compensation is limited to \$50,000</li> </ul>
Merit Annuity	<ul style="list-style-type: none"> <li>Eligibility: For members hired before January 1, 1993, achieve 25 to 30 years of service. For members hired on or after January 1, 1993, there is a minimum age requirement of 55 years of age and 30 years of service. For this group, reduced benefits payable before age 55 are effective January 1, 2015</li> <li>Basic (Supplementary) Benefit: Life annuity of 2.5% of compensation times years of service up to 30</li> <li>Coordinated Benefit:                         <ul style="list-style-type: none"> <li>Up to Age 65 = Basic (Supplementary) Benefit</li> <li>After Age 65 = Basic (Supplementary) Benefit minus \$40 for each year of service up to 30</li> </ul> </li> <li>Maximum Benefit: 75% of compensation. The maximum is applied to all pensions paid by the Employee Retirement System</li> </ul>
Accrued Benefit	<ul style="list-style-type: none"> <li>Basic (Supplementary) Benefit: 1.5% of compensation for each year of service, plus 0.5% of compensation for each year of service after 20 years</li> <li>Coordinated Benefit:                         <ul style="list-style-type: none"> <li>Up to Age 65 = Basic (Supplementary) Benefit</li> <li>After Age 65 = Basic (Supplementary) Benefit minus \$19 for each year of service up to 30</li> </ul> </li> </ul>
Death Benefit	<ul style="list-style-type: none"> <li>Eligibility: Participants with all credited service with PREPA and age 60 with 15 years of credited service or under age 60 with 20 years of credited service at retirement date or death in active service</li> <li>Benefit: Lump sum payment equal to the last salary at the time of retirement from active service or death in active service. The lump sum payment may be reduced in certain situations</li> </ul>





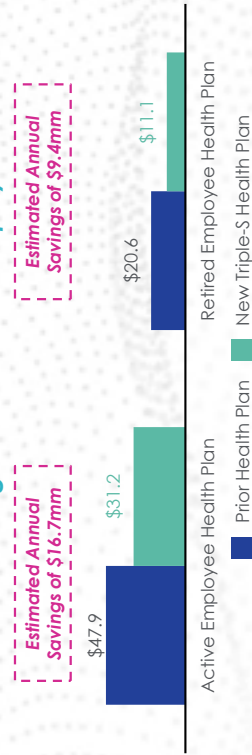
Exhibit E: PREPA Management Presentation

## OVERVIEW OF EMPLOYEE HEALTHCARE

### Healthcare Overview

- In October 2018, PREPA issued a RFP to procure health benefits program administration services for PREPA's active and retired employees
  - Purpose of the RFP was to solicit proposals regarding medical and behavioral health, dental, and pharmacy insurance plans
  - This RFP is part of an effort to lower employee benefit costs for PREPA while maintaining the quality of the existing health benefits
- In November 2018, Triple S Salud, Inc. ("Triple-S") was selected as the winning proponent
  - Will provide coverage for both active and retired PREPA employees as well as spouses and eligible dependents
- Historically, PREPA's healthcare plan required no monthly payroll contributions for premiums and had minimal copay and contribution requirements
- The new healthcare plan for active employees now includes copays and contributions requirements based on a commercial benchmark
  - However, employees continue to make no payroll contributions for premiums
- The new Triple-S contract provides overall coverage at similar levels to what was previously provided to PREPA employees
  - Benefits and coverage may be considered to be market standard or slightly above
- The contract with Triple-S went into effect on January 1, 2019, and will last for a period of 1 calendar year with 2 optional 1-year extensions
- Total healthcare costs to PREPA for the first year are estimated to be \$42.3mm
  - Costs for active employees total ~\$31mm per year (~\$432 per employee per month)<sup>1</sup>
  - Costs for retired employees total ~\$11mm per year<sup>1</sup>

### Estimated PREPA Savings Relative to Prior Employee Health Plan<sup>1</sup>



98 1. Based on a projected employee base of 5,750.



### About Triple-S

- Triple-S is the largest insurer in Puerto Rico, with products in all insurance segments including health, life, property, and casualties
  - Serves nearly 1 million customers and over 60 years of experience
  - Independent licensee of the BlueCross BlueShield Association
  - Trades on the New York Stock Exchange under "GTS"
- Triple-S is the only managed care organization in Puerto Rico that offers services in all segments:
  - Commercial groups and individuals, federal employees, local government employees, Medicaid, and Medicare

### Triple-S Provider Network

Provider	Commercial Preferred Provider Option	Advantage Health Maintenance Organization
General Practice	2,005	2,471
Specialist	3,588	3,864
Sub-Specialists	1,546	588
Dentists	1,173	1,173
Pharmacies	1,061	1,073
Hospitals	60	54
Laboratories	643	609
Emergency Rooms	42	46
Imaging Facilities	124	72
Other Providers	3,205	1,914
<b>Total</b>	<b>13,447</b>	<b>11,864</b>

### PREPA Healthcare Employee Participation

(As of June 30, 2018)

	Primary Subscribers	Total Subscribers
Active Employee Health Plan	5,744	17,315
Retired Employee Health Plan	6,994	11,167
<b>Total</b>	<b>12,738</b>	<b>28,482</b>





Exhibit E: PREPA Management Presentation

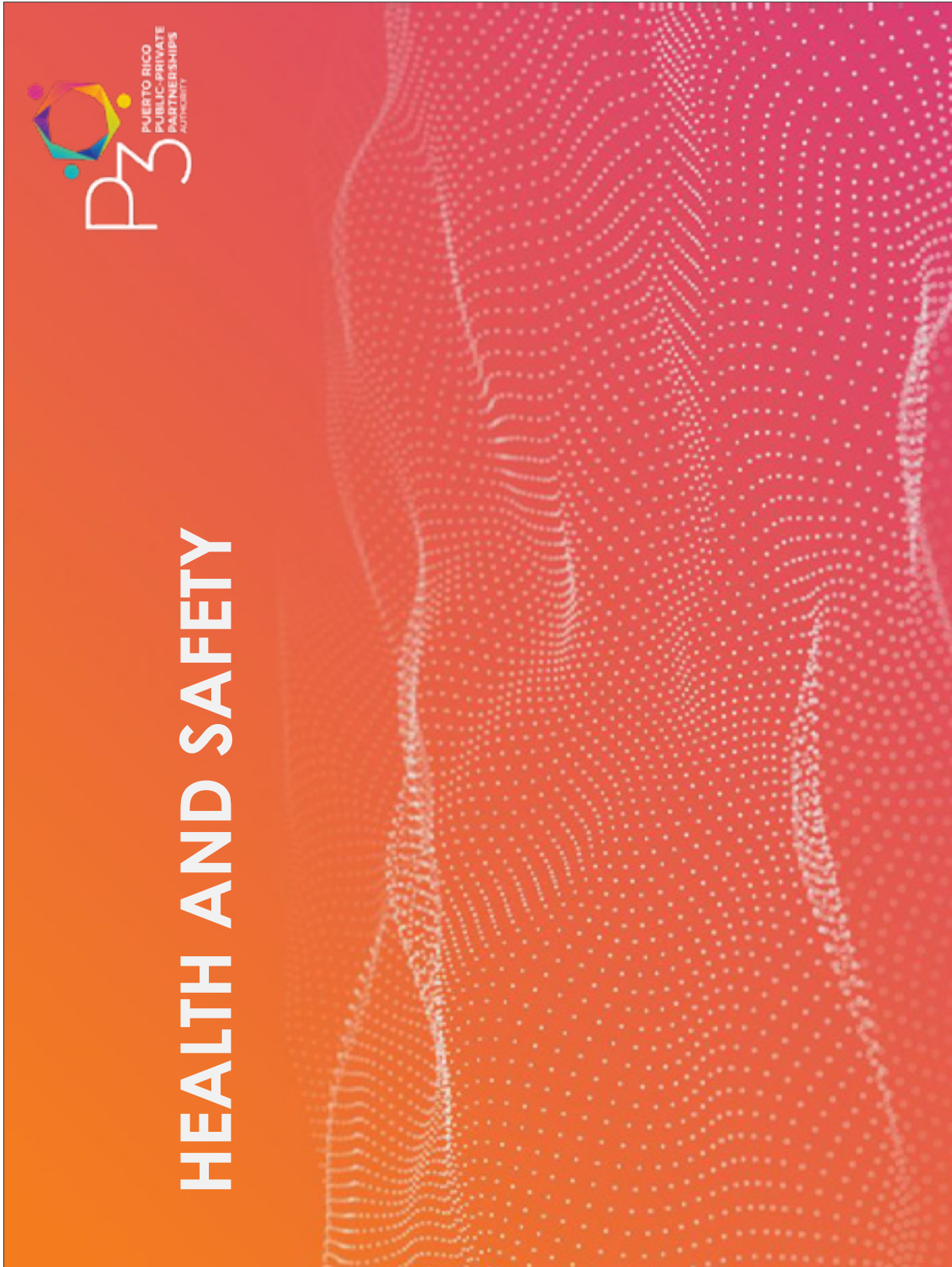






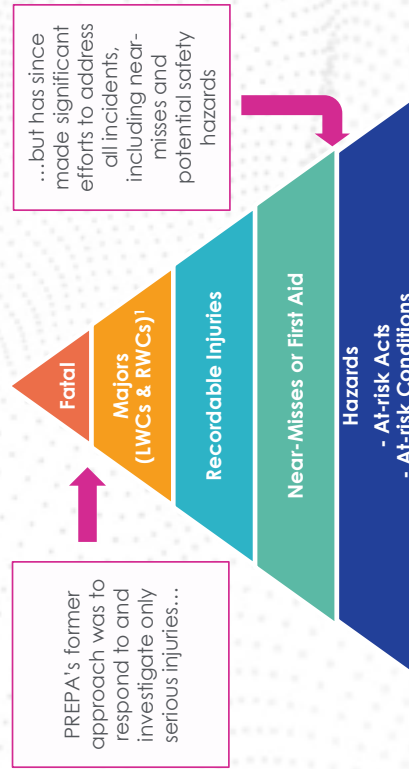
Exhibit E: PREPA Management Presentation

## HEALTH & SAFETY OVERVIEW

WHILE PREPA AIMS TO PROVIDE ALL EMPLOYEES WITH A SAFE WORK ENVIRONMENT, CONTINUED IMPROVEMENT IS NEEDED IN ORDER TO REACH ADEQUATE SAFETY LEVELS.

### Safety Overview

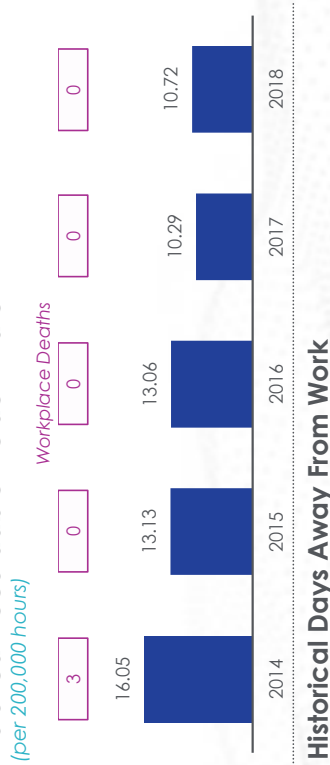
- PREPA has historically struggled to maintain acceptable safety standards
- In 2014, DuPont Sustainable Solutions ("DuPont") conducted an extensive study of PREPA's safety practices
- Per the DuPont study, PREPA's safety track record can historically be characterized by:
  - Low safety standards and absence of accountability
  - Comprehensive safety process and structure that are lacking and exhibit a fragmented approach
  - Lack of trust in workforce – significant gap in employee engagement, involvement and buy-in
- PREPA has recently made strides in improving workplace safety, but still falls short of generally accepted industry standards
  - Total Recordable Injury Rate ("TRIR") has fallen from 16.05 in 2014 to 10.29 in 2017 (vs. 1.56 for select U.S. utility peers)
- PREPA is currently targeting a stabilized TRIR of 8.00 and has implemented a series of new initiatives in order to reach this level



Source: DuPont Workplace Safety Assessment Report (the "DuPont Study").  
Note: Data is in calendar years.  
1. Lost work day case ("LWC") and restricted work day case ("RWC").

100

### Historical Recordable Incident Rate



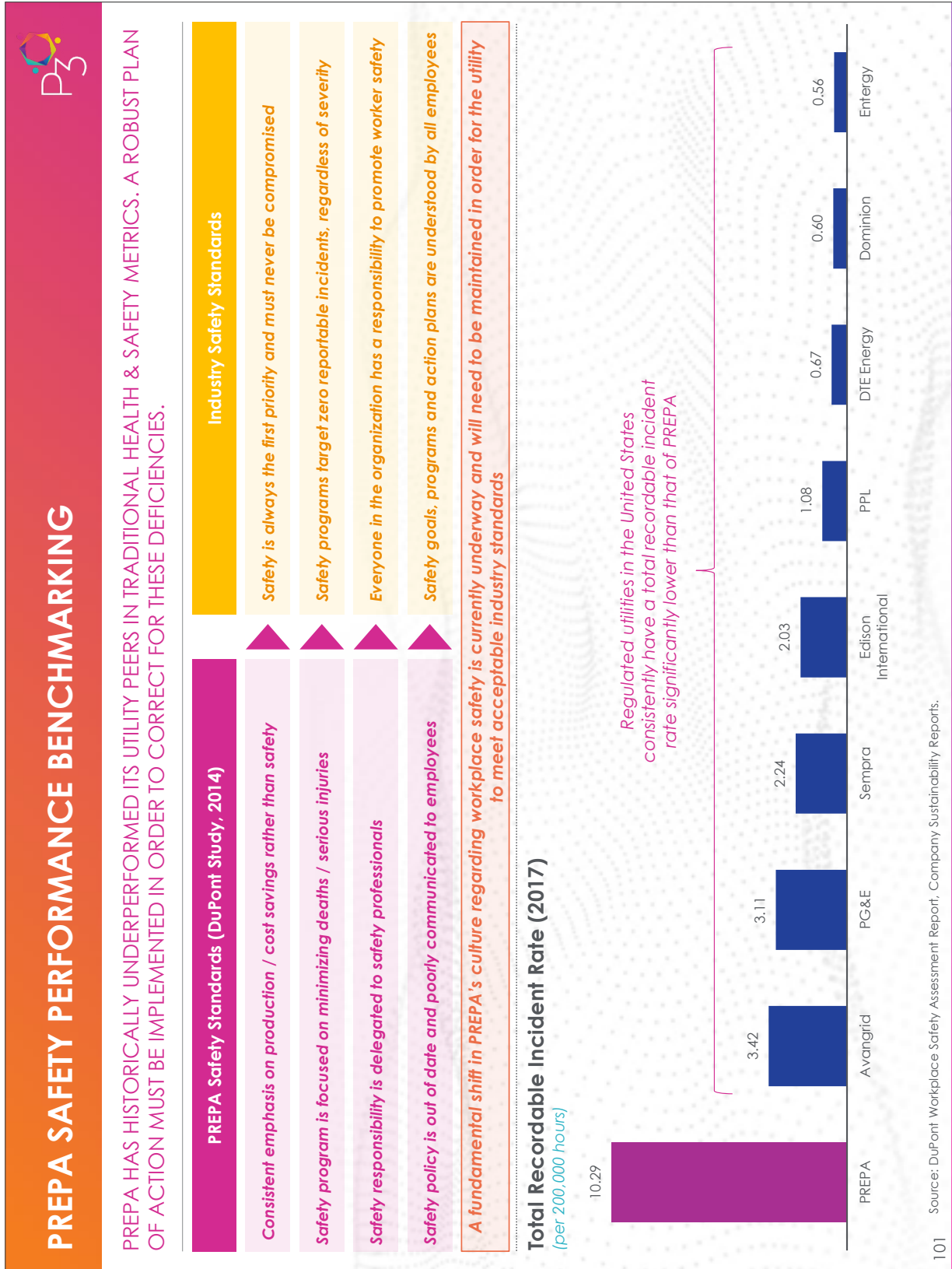
### Breakdown of Recordable Events (2018)







Exhibit E: PREPA Management Presentation







## PREPA SAFETY ACTIONS AND INITIATIVES



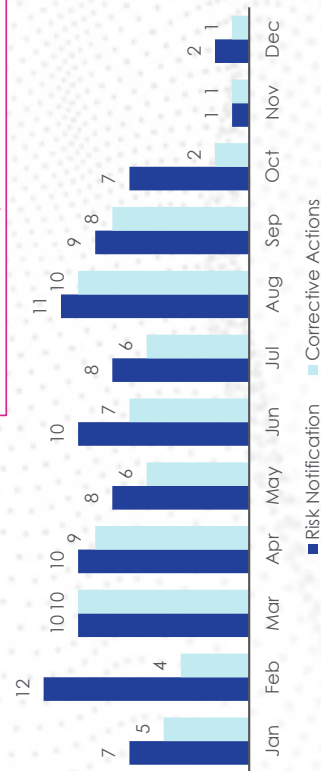
PREPA BEGAN TO IMPLEMENT DUPONT'S RECOMMENDATIONS AND INDUSTRY SAFETY STANDARDS, HOWEVER PROGRESS SLOWED DUE TO EMERGENCY HURRICANE RECOVERY. WORK TO IMPROVE SAFETY STANDARDS CONTINUES.

### Ongoing Safety Programs

- Following the release of the 2014 DuPont report, PREPA identified certain key recommendations to begin implementing into their system:
  - Safe Operational Leadership
    - Review safety vision, principles and standards
    - Review / define roles and responsibilities for all levels within the organization
  - Continued safety leadership training and development for line management system
    - Develop, train and support a safety observation process
    - Improve the incident investigation process
    - Continued incident investigation training and support
  - Develop and improve a Contractor Safety Program
    - Worker Engagement
      - Build effective 2-way communication process to engage workers
      - Deploy motivational systems, including rewards and recognition programs

### PREPA Near Miss Tracking (2018)

PREPA has begun to actively identify near misses and take corrective action where possible



### PREPA Safety Actions

#### Emergency Action Plan ("EAP")

- Evacuation Plan
  - Verification route
  - Drills and exercises
- Revised and update all Corporates Emergency Action Plans
  - Natural disasters
  - Active Shooting

#### Protective Equipment Suppliers

- Extended contract times
- Develop new contract for uniforms suppliers

#### Dielectric Test

- Develop a services contract

#### Industrial Hygiene

- Develop a professional services contract for 3 new Hygienists

#### Safety Workshops for:

- Municipality workers
- General communities

#### Internal Safety Distributions and Alerts

- Asegurate / Alerts
- Special Flash News

#### Contractor Safety Briefings

#### Safety Training and Re-Training

- Supervisor and managers
- General workers
- Develop new corporates trainings
- Re-training operational workers, linemen, crane operators, heavy equipment operators, etc.

#### Safety and Health Month Celebration

### PREPA Safety Committees

#### UTIER Central Committee



- Establish Coordinator Committee
- Hire Customer Services Manager Representative
- Invite to participate in OSHA and safety trainings

#### UEPI Central Committee



- Establish Local Safety Committees
- Invite to participate in OSHA and safety trainings
- Participate in Safety and Health Month Celebration

#### UITICE Central Committee



- Establish Local Safety Representatives
- Invite to participate in OSHA and safety trainings





Exhibit E: PREPA Management Presentation

## PREPA SAFETY ACTIONS AND INITIATIVES (CONT'D)

Safety Briefings



On-site safety briefing

Motivational and Awareness Campaigns




Safety press fours  
Employee motivational campaign

Monitoring, Alerts, and Response




Safety notices and alerts



Palo Seco team safety meeting



Employee motivational campaign



Monitoring and emergency response

**PREPA's Safety Mission**

To integrate occupational safety in all company processes and to provide a workplace free of recognized risks by taking care of one another, establishing proactive communication, and fostering a new safety culture





Exhibit E: PREPA Management Presentation







Exhibit E: PREPA Management Presentation

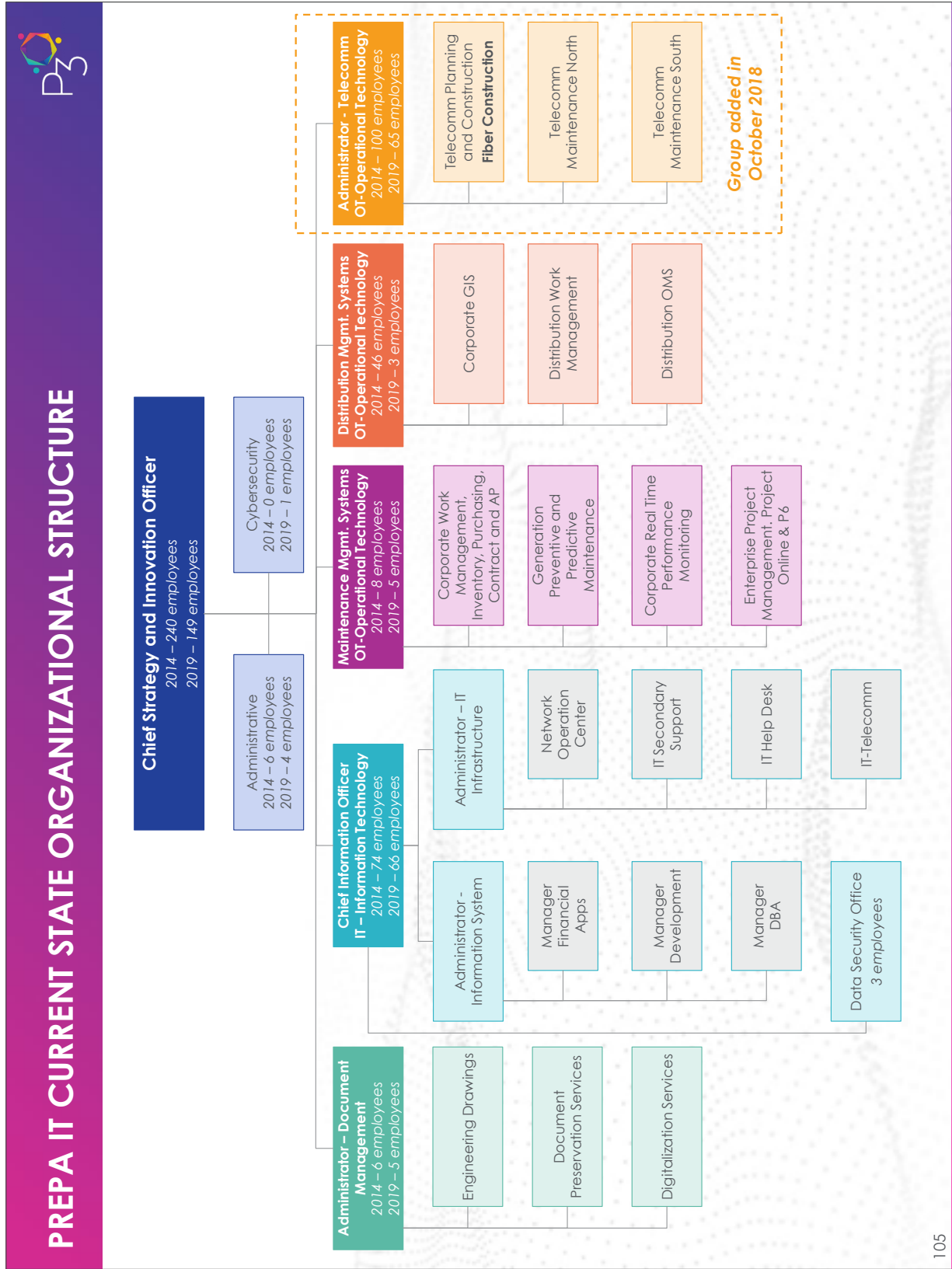
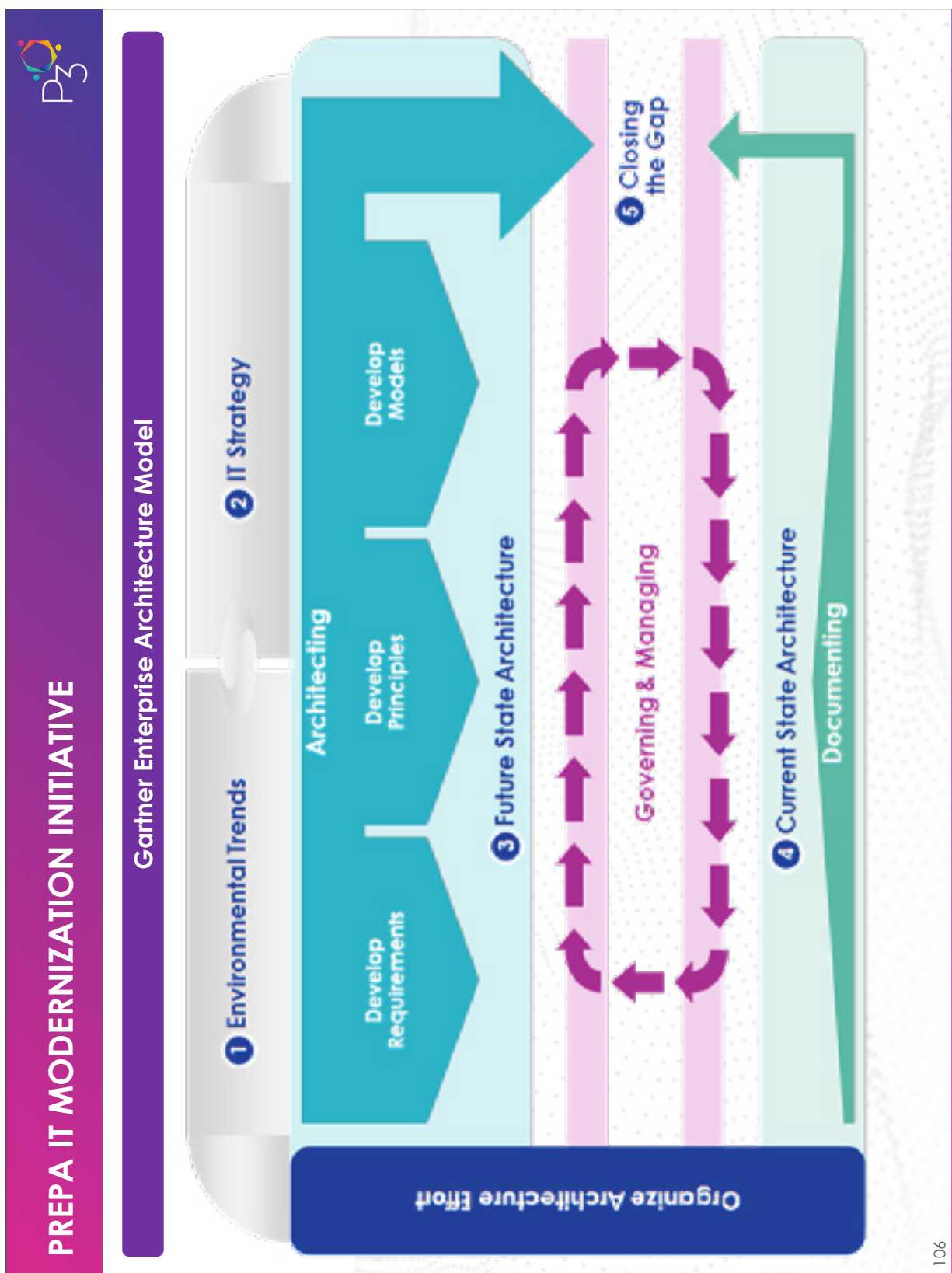






Exhibit E: PREPA Management Presentation







## ① & ②: IT ENVIRONMENTAL TRENDS & STRATEGY DRIVERS

1

Environmental Trends

- Utility Critical Infrastructure
  - Physical and Cyber Asset Security
- Asset Management – Asset Health
- Workforce Transformation - Mobility
- Renewables Integration
- Advance Metering Infrastructure
- Data Analytics – Big Data
- Consumer Technology
- Environmental Regulations

2

IT Strategy

- Digital Trust
  - IT Resilience: Infrastructure, system, and data security
- Smart Grid Information Network
  - Intelligent Automation
  - IT-OT Convergence
  - Advance Metering Infrastructure
- Asset Management – Asset Health
  - Reliability Centered Maintenance
- Service Delivery Management
  - Workforce Transformation – Mobile
- Customer Centric Service Management
  - Metering Data Management, Interactive Outages Map
  - Customer Web Portal, Green Button

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### ③: FUTURE STATE – NIST SMART GRID FRAMEWORK

PREPA USES THE NIST FRAMEWORK AS A GUIDE FOR DEVELOPING THE FUTURE STATE OF ITS IT SYSTEMS.

- PREPA previously had a contract with Black & Veatch to aid in the design and implementation of the new system framework
  - Contract was canceled due to conflicts of interest with the creditors in 2015
- The NIST conceptual model provides a high-level, overarching perspective of a few major relationships that are developing across the smart grid domains
  - Tool for identifying actors and possible communications paths in the Smart Grid
  - Useful way for identifying potential intra- and inter-domain interactions, as well as the potential applications and capabilities enabled by these interactions

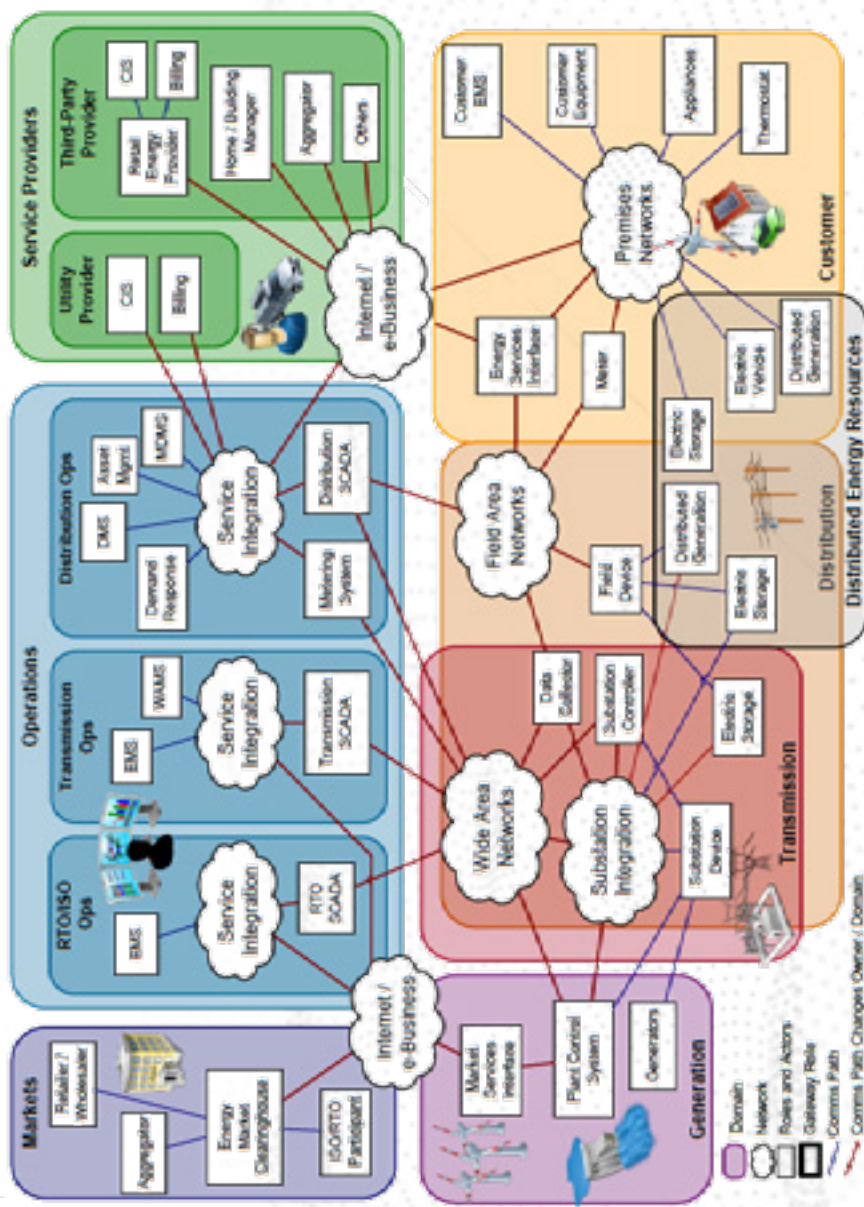






Exhibit E: PREPA Management Presentation

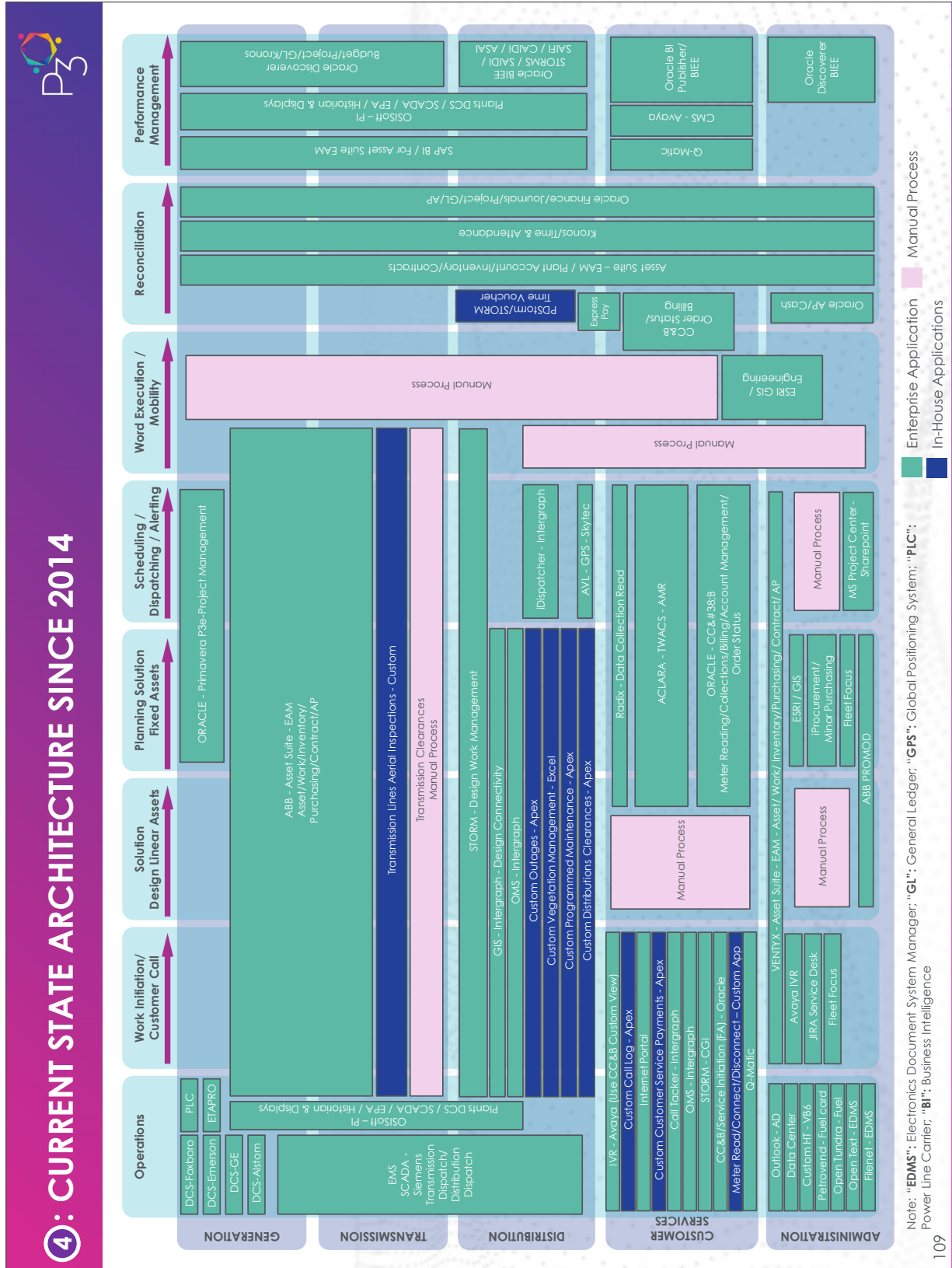






Exhibit E: PREPA Management Presentation

## ⑤: CLOSING THE GAP FOR FUTURE STATE<sup>1</sup>

FUTURE STATE BASED ON COMMON INFORMATION MODEL (CIM) FROM NIST AND EPRI.

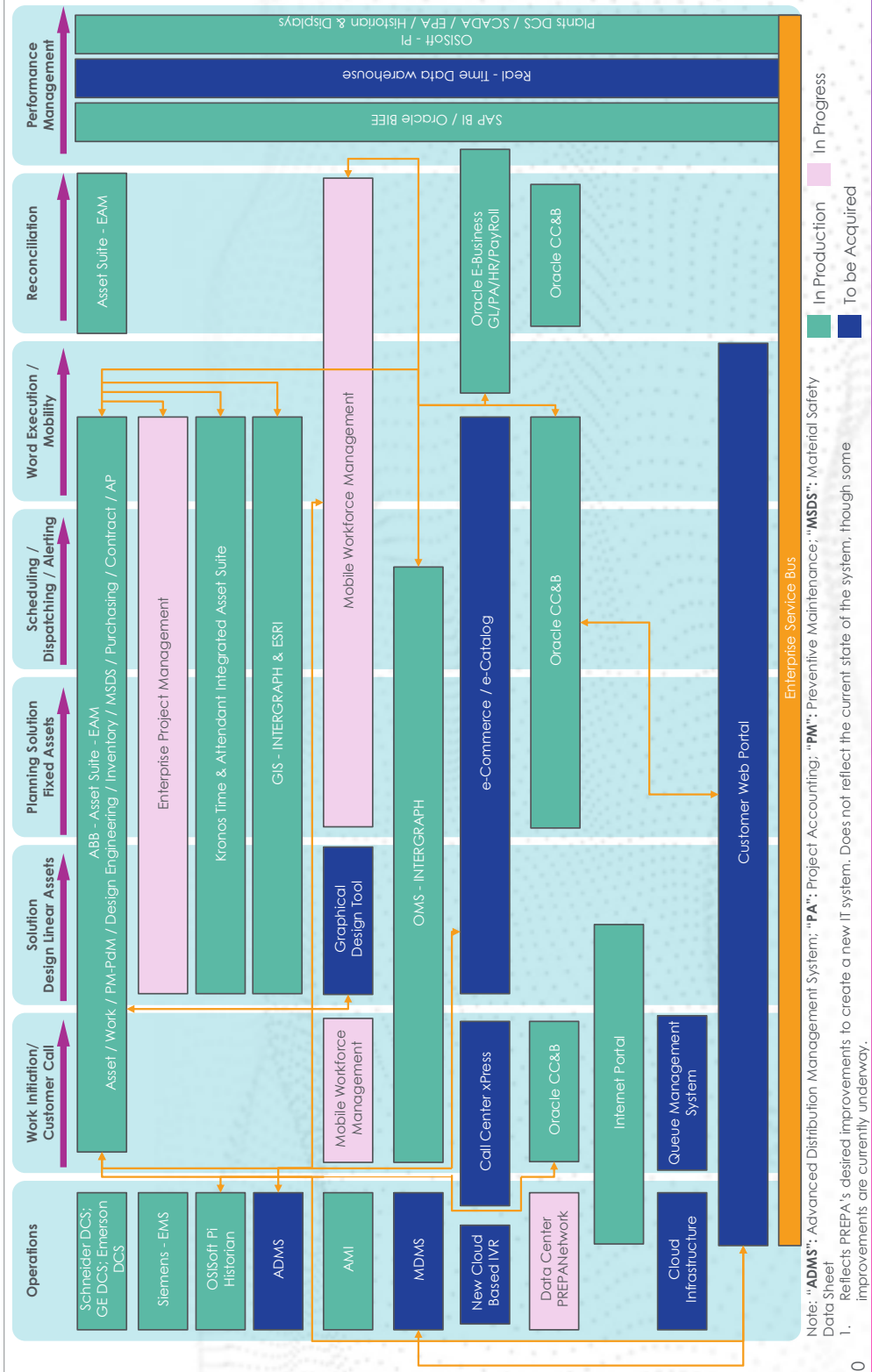






Exhibit E: PREPA Management Presentation

## SECURITY AND CYBERSECURITY



PREPA UTILIZES A NUMBER OF SYSTEMS AND PRACTICES TO ENSURE SECURITY OF THE SYSTEM AND INFORMATION.

### Currently Implemented

- Firewall best practices
- Perimeter (firewall) monitoring and remediation
- Vulnerability scan and patching
- Endpoint protection

### Implementation In-Progress

*Local Puerto Rico Cyber Security Firm in Negotiation for the Below Services*

- Security framework mentoring
- Security governance
- Network access control
- Managed security contract

### Other Security and Cybersecurity Programs

- Security Information Event Management ("SIEM")
- Penetration testing
- Privileged account security
- Security awareness for staff
- Two-factor authentication
- Network segmentation





## PREPA IT INFRASTRUCTURE OVERVIEW



PREPA'S CURRENT IT INFRASTRUCTURE IS BASED ON A PORTFOLIO OF APPLICATIONS PREPA HAS HELD SINCE 2014. THE IT INFRASTRUCTURE IS SPECIFICALLY DESIGNED TO FUNCTION WITHIN A VERTICALLY INTEGRATED UTILITY.

### Distribution IT Architecture (2014 – 2018)

- SCADA Energy Management System ("EMS") (Siemens) is used for switching operations at a feeder level
  - The SCADA system depends on telecommunications
- PREPA uses G/Technology GIS from Intergraph as a master database in T&D
- Outage Management System ("OMS") is integrated with SCADA EMS by Intercontrol Center Communications Protocol ("ICCP"), STORMS, and the network connectivity from the GIS
  - Receives calls from the customer call center and outages from SCADA
  - According to the reported connectivity, system performs a trouble call analysis (which is a module within OMS) and consolidates connected calls into an event
  - Based on event information, distribution crews are dispatched to the outage
  - This program is supported by an Automatic Vehicle Location ("AVL") to assist crews in locating the failure point
- STORM: work management system designed for distribution operations
  - Manages distribution standards and parts as compatible units
  - Used for construction and programmed maintenance of sub-transmission and distribution lines
  - STORM will be replaced with Asset Suite Design Engineering in the near-term, but PREPA prefers a Graphical design tool integrated with Asset Suite
- Several in-house, custom applications manage aspects of distribution operations:
  - Custom Apex application to produce SAIDI, SAIFI, CADI, and Average Service Availability Index ("ASAI") statistics
  - Custom excel spreadsheet for vegetation management
  - Custom application for programmed maintenance and distribution clearance orders
  - PD STORM is used to gather information on employee time sheets
- ESTORM: this is a copy of STORMS data used only for emergencies
- In outage events, work execution is available only by iDispatcher and Radio Telecommunication
  - Mobility is a manual process
- PREPA has a Mobile Workforce Management application from ABB to manage field work across all business units
  - Due to lack of resources, this application has not yet been implemented
  - This is a strategic project as it may be used to measure labor productivity and field work management for telecom, T&D, and customer service crews

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### Transmission IT Architecture (2014 – 2018)

- SCADA EMS (Siemens EMS), which is dependent on telecommunication infrastructure
- Synchronous Optical Network ("SONET") Backbone: this is 13-year old Cisco infrastructure
- OSIsoft PI Historian: interconnected with power plant Foxboro Digital Control System ("DCS") and connected by ICCP interface with EMS
- Calixto and OSIsoft PI Historian: monitoring systems for transmission transformers
- EAM: asset suite used for supply chain
  - The PREPA substation maintenance protection group and program maintenance group have historically preferred to use a MS Access database
  - Reliability practices are generally not managed with EAM; custom spreadsheets are used to track progress and metrics
- Power line inspection programs are performed by an in-house, custom application
- Power line clearance is a manual process
  - The work execution is completely manual for high voltage maintenance, electric system protection, and construction engineering





## PREPA IT INFRASTRUCTURE OVERVIEW (CONT'D)



### Customer Service IT Architecture (2014 – 2018)

- PREPA's ~1.5mm customers are managed with Oracle Customer Care and Billing ("CC&B")
  - CC&B is the core application for customer service and all related processes
- The customer service call center uses Avaya IVR (on premise), a dedicated VoIP system for the call center
  - A proposed modernization process to outsource call center operations is underway
- The PREPA web portal was redesigned for cyber security compliance purposes following Hurricanes Irma and Maria
- Since 2016, PREPA has utilized a custom application integrated with OMS, STORM, and CC&B to operate the customer service call center
  - This allows a single point of contact regarding customer-related requests
- A Queue Management System is utilized for the commercial district in-person offices
  - This is expected to be replaced for a new Queue Management System with Kiosk integration
- For meter readings, PREPA uses a legacy communication infrastructure based on Aclara Two Way Automatic Communications System ("TWACS") AMR infrastructure with some Remoted Disconnect functionality (~360,000 meters)
  - A custom application can remotely disconnect customer meters, if the meters have that functionality
- For ~18,000 smart meters, PREPA runs a pilot Advanced Metering Infrastructure System ("AMI") application operated by the IT division
- Work execution and mobility is a fully manual process, where the CC&B system sends information to local district offices and local supervisors dispatch crews
  - When the crews return to the district office, the field activity is closed and updated in the CC&B system
- A new Meter Data Management System ("MDMS") from Aclara is in the process of being implemented to manage legacy and modern infrastructure
- The primary challenge preventing better-quality customer service stems from inadequate IT infrastructure
  - Current IT systems are unable to sufficiently track customer requests, analyze and store customer data, and efficiently dispatch resources
  - Significant upgrades to the customer service IT platform will be required in order to improve upon current customer service levels

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### Generation IT Architecture (2014 – 2018)

- Foxboro DCS, now Schneider, is used at the generation power plants
  - DCS is expected to be upgraded due to cybersecurity recommendations (upgrade is expected to cost ~\$11.9mm)
  - System is installed at Costa Sur, Aguirre, San Juan, and Palo Seco power plants
- Emerson DCS is installed at San Juan 5 & 6, and is expected to be upgraded in the near-term for ~\$1.1mm
- Alstom DCS is installed at Cambalache
- ETAPRO (General Physics) provides real-time performance monitoring
  - As this application is at the end of its life, it will be replaced by a Process Plugging module integrated with OSIsoft PI Historian
  - Process Plugging Real Time Performance Monitoring has started in San Juan 5 & 6 to replace ETAPRO (cost of ~\$180,000); Costa Sur 5 & 6 is next (estimated cost of ~\$500,000)
- OSIsoft PI Historian: each power plant has their own PI server with PI – PI Interface to report data to a corporate PI server at the dispatch center in Monacillos
- Corporate Asset Suite Enterprise Asset Management is used for work management, inventory, purchasing, contracting, and accounts payable
- Power plants manage their fuel inventory in the Asset Suite inventory module
- The Predictive Maintenance ("PdM") Program is a model outsourced to Vibra
  - Reliability is cloud-based and is managed with iReliability; Asset Suite is used to create work orders and follow up on power plants
  - Vibra is in charge of the overall health of the most critical generation assets
  - Outsourced Predictive Maintenance programs include: machinery vibrations, infrared thermography, and ultrasound
- SetPoint Condition Based Monitoring is a pilot program to replace the GE Bently Nevada System One Hardware and Software with a SetPoint and Metrix solution
  - Started in San Juan 5 & 6 (cost of ~\$62,000). PREPA will continue with the rationalizations of the system
  - The data is stored real-time in OSIsoft PI Historian
- Programmed outages were previously managed in Primavera P3e
  - Full history of programmed outages for each power plant is included in this database
- Primavera has been replaced with a cloud-based "P6" and is in the process of contracting professional services from Eniac Corporation in Puerto Rico





## PREPA IT INFRASTRUCTURE OVERVIEW (CONT'D)

### Corporate / Administration IT Architecture (2014 – 2018)

#### Physical Infrastructure

- The backbone of PREPA's information technology and operational technology is an island-wide fiber optic system deployed over transmission line facilities
  - The cables deployed have multiple fibers assigned to different electrical network services and systems
  - This fiber optic infrastructure provides a medium for transmission of control, operations, protection, management, and other types of traffic
- Existing fiber optic infrastructure is limited by its physical topology with challenges such as the fiber count, the routes, the distances that can be reached with available transceivers, the network services layering (access, aggregation / edge, and core), transport technology obsolescence, and the integration of the different technologies in use
- PREPA has an existing network composed of SONET, Time Division Multiplexing ("TDM"), and other legacy system equipment that transports all the operational technology traffic
  - These systems use a combination of fiber optic (dark fiber) and wireless media (microwave radios)
- Separate IT network consisting of multiple devices (routers and switches) connected through fiber optic and wireless media
- PREPA expects to deploy an island-wide optical backbone with Dense Wavelength Division Multiplexing ("DWDM") technology
  - All IT and operational technology subsystems will be aggregated in a high capacity and reliable optical network, decoupling the logical IP topology from the physical fiber plant
  - Per the nature of optical multiplexing, all traffic sources can share the DWDM channels, but are isolated assuring security and planned bandwidth
  - Scalability of the DWDM provides room to grow, addressing new traffic demands associated with new business needs
- To provide resiliency and redundancy, PREPA expects to implement a Multiprotocol Label Switching ("MPLS") network
  - The MPLS network would provide flexibility, redundancy, and high availability of a carrier-grade transport network
  - Also adds resiliency, multiple traffic management, and reliability of utility-grade infrastructure
- The implementation of the DWDM and MPLS systems, including all materials, labor, and installation with 5 years of support, is estimated to cost ~\$36mm

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#### Programs and Applications

- Information technology administration
  - All accounts were recently migrated to Office 365 and SharePoint Online
  - The Service Desk, Jira (from Atlassian in the Cloud) is used
- Microsoft Project Center / Project Online are being implemented to the Cloud
- PREPA manages 4 data centers as a transition to a Collocation Facility at PREPA Network Isla Verde, Santurce Data Center, Monacillos Operational Technology Data Center, and Aguirre Disaster Recovery Data Center
- Fleet Focus work management is used to manage the transportation fleet, and is expected to be replaced by Asset Suite Work Management in the near-term
- HPE infrastructure is used, with a Network Operations Center on-site
- Operational technology and telecommunications
  - Remote terminal unit ("RTU") SCADA
  - AMR infrastructure
  - Telephony
  - Fiber optics, trunked radio system, and licensed and non-licensed microwaves
  - Demand metering system
  - Distribution Automation ("DA")
  - Meteorological stations
  - Water reservoirs remote monitoring and Seismic Network
- ESRI GIS is used for surveying
- A Kronos corporate application is used to track employee time and attendance
  - This application is integrated with payroll, but is not integrated with the work management programs
- For any purchase less than \$5,000, iProcurement from Oracle E-business is utilized
  - At a corporate level, E-business manages the financial aspects of PREPA, and is closely integrated with Asset Suite for the corporate supply chain
- Other inventory, accounts payable, and purchasing uses Asset Suite Purchasing
- Oracle BI is used for financial reporting and SAP BO is used for work management, inventory, purchasing, contract, and accounts payable reporting
- Oracle HR is used for tracking of human resources
- Legal affairs uses a custom system with FileNet Case Management, though this is not integrated to the Enterprise Resource Planning ("ERP") for contracts and purchasing
- Risk management office uses a custom application isolated from ERP
- Disbursement department uses Asset Suite AP for three-way math purchasing and Oracle AP for direct payments





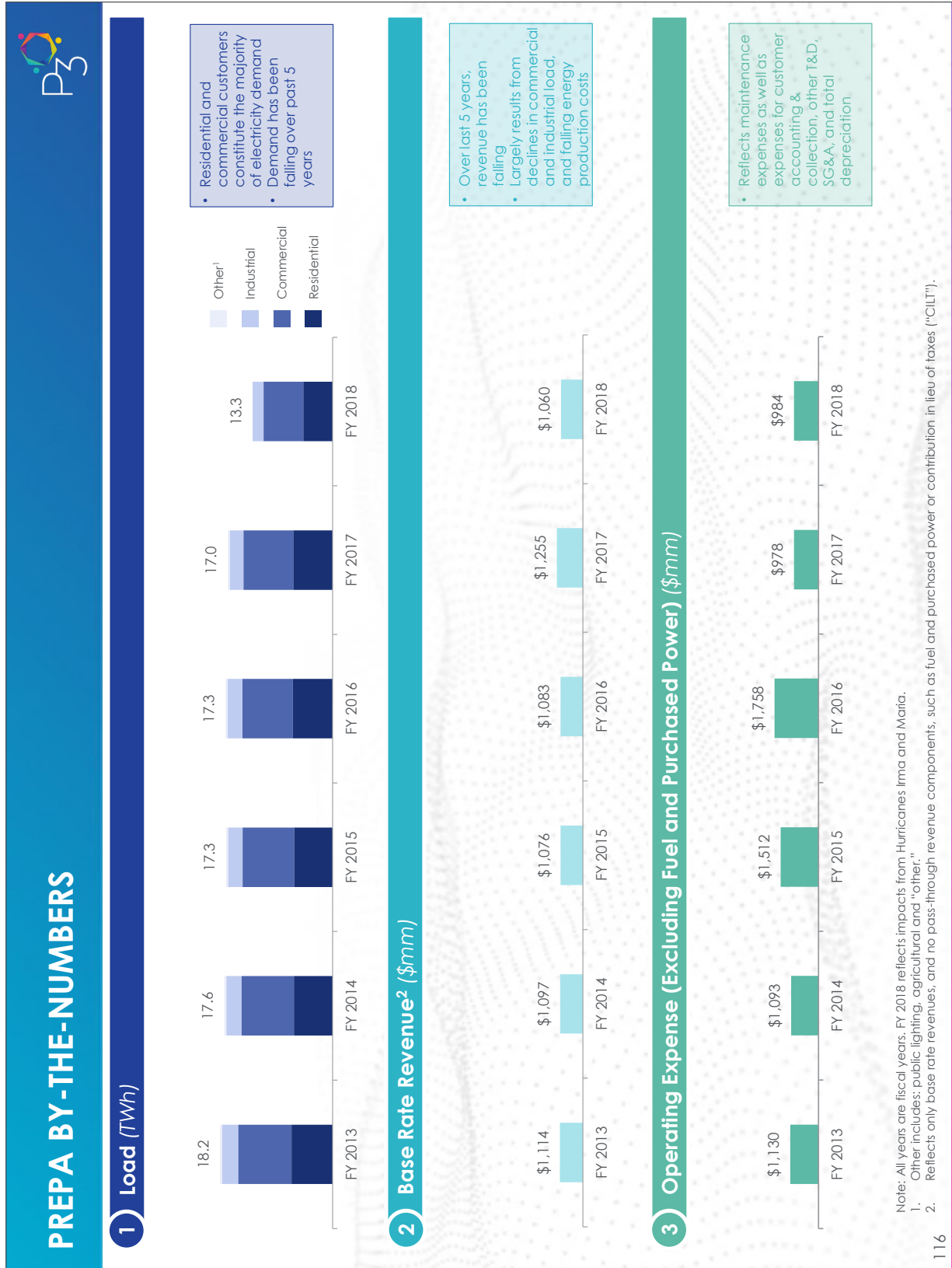
Exhibit E: PREPA Management Presentation







Exhibit E: PREPA Management Presentation







## CASH FLOW BEFORE FINANCING AND TOTAL DEBT



### Cash Flow Before Financing Activities

(\$mm)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Net Cash Flow Provided by Operating Activities	\$400	\$443	\$502	\$422	\$300	\$348	\$486	\$350	\$114	\$573	\$657	\$528	\$84	\$394	\$627	\$208	\$476
Interest Paid on Notes Payable	(3)	(6)	(0)	0	0	(7)	(14)	(37)	(42)	(32)	(41)	(28)	(5)	(1)	(1)	(0)	(0)
Interest Paid on Fuel Line of Credit	(7)	(8)	(4)	(2)	(1)	(3)	(7)	(10)	(9)	(11)	(12)	(3)	(6)	(17)	(27)	(57)	(51)
Interest Paid on Revenue Bonds	(202)	(211)	(223)	(245)	(251)	(273)	(261)	(298)	(243)	(285)	(354)	(209)	(380)	(398)	(410)	(428)	(618)
Interest Collected on Investments	50	38	43	33	15	22	21	18	36	25	12	5	25	25	42	15	44
<b>Cash Flow From Operations</b>	<b>\$238</b>	<b>\$257</b>	<b>\$318</b>	<b>\$208</b>	<b>\$43</b>	<b>\$87</b>	<b>\$225</b>	<b>\$23</b>	<b>(\$144)</b>	<b>\$270</b>	<b>\$262</b>	<b>\$292</b>	<b>(\$282)</b>	<b>\$3</b>	<b>\$231</b>	<b>(\$262)</b>	<b>(\$149)</b>
Construction Expenses	(426)	(406)	(413)	(423)	(469)	(554)	(545)	(575)	(673)	(527)	(395)	(424)	(359)	(316)	(289)	(227)	(113)
<b>Cash Flow Before Financing Activities</b>	<b>(\$188)</b>	<b>(\$149)</b>	<b>(\$95)</b>	<b>(\$215)</b>	<b>(\$405)</b>	<b>(\$467)</b>	<b>(\$320)</b>	<b>(\$551)</b>	<b>(\$817)</b>	<b>(\$257)</b>	<b>(\$134)</b>	<b>(\$132)</b>	<b>(\$642)</b>	<b>(\$313)</b>	<b>(\$58)</b>	<b>(\$489)</b>	<b>(\$262)</b>

### Total Debt

(\$mm)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Notes Payable	\$388	\$125	\$125	\$185	\$186	\$242	\$493	\$437	\$396	\$607	\$15	\$194	\$605	\$762	\$734	\$734	\$751
Current Portion of Long-Term Debt	263	286	280	285	332	298	378	351	584	853	172	359	380	414	432	449	240
Long-Term Debt	3,485	3,956	4,353	4,226	4,578	5,002	4,870	5,764	6,516	5,776	7,400	7,537	7,950	7,813	8,247	8,020	8,126
<b>Total Debt</b>	<b>\$4,136</b>	<b>\$4,367</b>	<b>\$4,758</b>	<b>\$4,697</b>	<b>\$5,096</b>	<b>\$5,543</b>	<b>\$5,741</b>	<b>\$6,552</b>	<b>\$7,495</b>	<b>\$7,236</b>	<b>\$7,587</b>	<b>\$8,089</b>	<b>\$8,936</b>	<b>\$8,988</b>	<b>\$9,413</b>	<b>\$9,203</b>	<b>\$9,118</b>

Source: PREPA audited financial statements. All years are fiscal.





## SUMMARY HISTORICAL AUDITED INCOME STATEMENT



(\$ Thousands)	FY 2013 <sup>1</sup>	FY 2014	FY 2015 <sup>3</sup>	FY 2016	FY 2017 <sup>4</sup>	FY 2018 <sup>4</sup>
<b>Revenues:</b>						
Operating revenues	\$4,843,016	\$4,468,922	\$3,865,458	\$2,994,893	\$3,403,570	\$3,015,096
<b>Operating expenses:</b>						
Fuel	(\$2,603,577)	(\$2,345,000)	(\$1,887,245)	(\$1,215,312)	(\$1,213,893)	(\$1,199,944)
Purchased power	(755,686)	(807,620)	(789,717)	(687,212)	(726,381)	(533,525)
Maintenance	(218,950)	(201,994)	(270,001)	(317,061)	(152,447)	(160,915)
Other operating expenses <sup>2</sup>	(910,766)	(891,278)	(1,241,641)	(1,441,281)	(825,317)	(823,034)
<b>Total operating expenses</b>	<b>(\$4,488,979)</b>	<b>(\$4,245,892)</b>	<b>(\$4,188,604)</b>	<b>(\$3,660,866)</b>	<b>(\$2,918,038)</b>	<b>(\$2,717,418)</b>
<b>Operating income / (loss)</b>	<b>\$354,037</b>	<b>\$223,030</b>	<b>(\$323,146)</b>	<b>(\$665,973)</b>	<b>\$485,532</b>	<b>\$297,678</b>
Interest income and other	26,329	21,157	44,263	44,315	0	0
Interest expense, net	(386,867)	(431,180)	(468,278)	(474,283)	(483,386)	(474,142)
Impairment loss on GDB deposits	0	0	(144,733)	0	0	0
<b>(Loss) / Gain before CILT and capital contributions</b>	<b>(\$6,501)</b>	<b>(\$186,993)</b>	<b>(\$891,894)</b>	<b>(\$1,095,941)</b>	<b>\$2,146</b>	<b>(\$176,464)</b>
CILT and other	(297,551)	(277,776)	(273,460)	(172,467)	(208,434)	(216,299)
Bond discount and defeasance amort.	0	0	0	0	(1,176)	(1,399)
<b>Loss before capital contributions</b>	<b>(\$304,052)</b>	<b>(\$464,769)</b>	<b>(\$1,165,354)</b>	<b>(\$1,268,408)</b>	<b>(\$207,464)</b>	<b>(\$394,162)</b>
Contributed capital	31,979	44,959	21,404	8,243	7,317	1,179
<b>Change in net position</b>	<b>(\$272,073)</b>	<b>(\$419,810)</b>	<b>(\$1,143,950)</b>	<b>(\$1,260,165)</b>	<b>(\$200,147)</b>	<b>(\$392,983)</b>
Net position at beginning of year	(\$575,122)	(\$847,195)	(\$1,267,005)	(\$3,577,901)	(\$4,838,066)	(\$5,038,213)
Change in pension accounting cost	0	0	(1,643,985)	0	0	0
Net Effect of the 2015 Restatement <sup>3</sup>	0	0	477,039	0	0	0
<b>Net position at end of year</b>	<b>(\$847,195)</b>	<b>(\$1,267,005)</b>	<b>(\$3,577,901)</b>	<b>(\$4,838,066)</b>	<b>(\$5,038,213)</b>	<b>(\$5,431,196)</b>

Note: All years are fiscal.  
1. Restated financials.  
2. Other includes: other production, transmission and distribution, customer accounting and collection, selling, general and administrative, and depreciation.  
3. 2015 financials were restated. Summary of revisions provided at the end of this section.  
4. 2017 and 2018 financials are sourced from PREPA's Monthly Operating Reports and thus are unaudited and subject to material change.





Exhibit E: PREPA Management Presentation

SUMMARY HISTORICAL AUDITED BALANCE SHEET						
P3						
(\$ Thousands)	FY 2013 <sup>1</sup>	FY 2014	FY 2015 <sup>5</sup>	FY 2016	FY 2017 <sup>6</sup>	FY 2018 <sup>6</sup>
<b>Assets:</b>						
Current, non-current and other assets	\$3,177,881	\$3,504,903	\$3,248,644	\$1,589,436	\$3,428,521 <sup>7</sup>	\$4,528,339 <sup>7</sup>
Deferred outflows	177,283	126,812	1,670,065	1,299,024	1,699,584 <sup>8</sup>	1,707,423 <sup>8</sup>
Total utility plant, net <sup>2</sup>	6,838,558	6,847,456	6,699,345	6,702,210	6,249,255	6,013,476
<b>Total assets and deferred outflows</b>	<b>\$10,193,722</b>	<b>\$10,479,171</b>	<b>\$11,618,054</b>	<b>\$9,590,670</b>	<b>\$11,377,360</b>	<b>\$12,249,238</b>
<b>Liabilities:</b>						
Accounts payable and accrued	\$1,301,028	\$1,586,390	\$2,140,966	\$1,149,923	\$3,569,669	\$4,020,118
Current portion of long-term debt	413,546	432,281	449,254	250,813	478,433	493,292
Long-term debt, excluding current	7,812,660	8,247,006	8,020,142	8,126,433	7,947,456	7,937,346
Net pension liability <sup>3</sup>	NA	NA	3,558,872	3,603,802	3,558,872	3,558,872
Other liabilities <sup>4</sup>	1,513,683	1,480,499	1,446,057	1,227,105	1,409,509	2,219,172
Deferred inflows of resources <sup>5</sup>	NA	NA	57,703	70,660	57,703	57,703
<b>Total liabilities and deferred inflows</b>	<b>\$11,040,917</b>	<b>\$11,746,176</b>	<b>\$15,672,994</b>	<b>\$14,428,736</b>	<b>\$17,021,642</b>	<b>\$18,286,503</b>
<b>Net position (deficit):</b>						
Net investments in utility plant	(\$32,432)	(\$253,448)	(\$1,017,787)	(\$1,328,918)	Breakdown not provided in PREPA's Monthly Operating Reports	
Restricted	0	0	0	0		
Unrestricted	(814,763)	(1,013,557)	(3,037,153)	(3,509,148)		
<b>Total net position (deficit)</b>	<b>(\$847,195)</b>	<b>(\$1,267,005)</b>	<b>(\$4,054,940)</b>	<b>(\$4,838,066)</b>	<b>(\$5,644,282)</b>	<b>(\$6,037,265)</b>
<b>Liabilities + Net Position</b>	<b>\$10,193,722</b>	<b>\$10,479,171</b>	<b>\$11,618,054</b>	<b>\$9,590,670</b>	<b>\$11,377,360</b>	<b>\$12,249,238</b>

- Note: All years are fiscal.
- Restated financials.
  - Includes accumulated depreciation and construction in progress.
  - Change in accounting methodology.
  - Includes all other short- / long-term liabilities (including notes payable).
  - 2015 financials were restated. Summary of revisions provided at the end of this section.
  - 2017 and 2018 financials are sourced from Monthly Operating Reports and thus are unaudited and subject to material change.
  - Includes: total current assets, non-current receivables, and total restricted assets.
  - Includes: total deferred debits and deferred outflows of resources





SUMMARY HISTORICAL CASH FLOW STATEMENT				
	FY 2013 <sup>1</sup>	FY 2014	FY 2015 <sup>2</sup>	FY 2016
<b>(\$ Thousands)</b>				
Cash flow from operations	\$393,526	\$627,066	\$207,742	\$475,508
Cash flows from noncapital financing	128,076	(52,649)	(47,560)	(54,048)
Cash flows from capital financing	(888,171)	(268,692)	(848,115)	(815,536)
Cash flows from investing	104,796	(77,515)	307,020	428,202
<b>Change in Cash</b>	<b>(\$261,773)</b>	<b>\$228,210</b>	<b>(\$380,913)</b>	<b>\$34,126</b>
Cash at beginning of period	815,024	553,251	781,461	400,548
<b>Cash at end of period</b>	<b>\$553,251</b>	<b>\$781,461</b>	<b>\$400,548</b>	<b>\$434,674</b>

Note: Cash flow statements are not provided in PREPA's Monthly Operating Reports

Accordingly, the preliminary statement of cash flows for 2017 and 2018 is not yet available

Notes: All years are fiscal.

1. Restated financials.

2. 2015 financials were restated. Summary of revisions provided at the end of this section.





## SUMMARY OF REVISIONS TO RESTATED 2015 FINANCIALS

(\$ Thousands)	Capital Assets	Accounts Receivable Related to CILT	Accounts Payable Related to CILT	Other Assets	Unearned Revenues	Net Position
<b>As Previously Reported</b>	<b>\$6,699,345</b>	<b>\$1,318,758</b>	<b>(\$1,428,050)</b>	<b>\$28,967</b>	<b>(\$36,522)</b>	<b>(\$4,054,940)</b>
Correction of Assets Not Previously Capitalized	53,216	--	--	--	--	53,216
Correction of Accumulated Depreciation	313,851	--	--	--	--	313,851
Unearned Revenues	--	--	--	--	29,648	29,648
Other Assets	--	--	--	(28,967)	--	(28,967)
Accounts Receivable Related to CILT	--	(909,813)	--	--	--	(909,813)
Accounts Payable Related to CILT	--	--	1,019,104	--	--	1,019,104
<b>Beginning Balances, As Restated</b>	<b>\$7,066,412</b>	<b>\$408,945</b>	<b>(\$408,946)</b>	<b>\$0</b>	<b>(\$6,874)</b>	<b>(\$3,577,901)</b>

Note: Reflects restatement of FY 2015 audited financials.





Exhibit E: PREPA Management Presentation







Exhibit E: PREPA Management Presentation

## HISTORY OF PREPA NETWORKS

PREPA NET WAS ESTABLISHED IN 2004 TO MONETIZE SURPLUS PREPA FIBER OPTIC CAPACITY.

### History of PREPA Networks

- Act No. 189 of 2003 enabled PREPA to establish, develop or acquire subsidiaries, for profit or non-profit, in Puerto Rico or abroad
  - These subsidiaries are to be for the purpose of developing, financing, building and operating projects in order to best serve PREPA's electrical infrastructure
- From 2004-2009, PREPA's Governing Board created multiple subsidiaries, all with different corporate purposes
- In March 2004 PREPA Networks, Corp. ("PREPA Net") was created as a subsidiary through Resolution No. 3175 in order to monetize the surplus fiber optic capacity in PREPA's system through local wholesale telecommunication services
  - PREPA Net executed an Optical Telecommunication Infrastructure Lease Agreement with PREPA in 2005, amended and renewed in 2017
- In 2008, PREPA Net acquired Telecomunicaciones Ultramarinas de Puerto Rico, Inc. which focused on international telecommunications services
- In 2009, PREPA's Governing Board created PREPA Holdings, LLC ("PREPA Holdings") and transferred to it ownership in all existing subsidiaries, including PREPA Net (Resolution No. 3661)
  - All of PREPA's subsidiaries are reorganized as Delaware LLCs
  - PREPA Holdings has no employees, only Board Members, who are appointed to the PREPA Holdings Board by PREPA's Governing Board
- In 2017, Law 80 was passed, which prevents PREPA Net from selling products directly to retail customers

### PREPA Net Simplified Organizational Structure



### PREPA Holdings Board Composition

Seat Affiliation	Board Member
PREPA Governing Board	Ralph Kreil, PE
PREPA Governing Board	<i>Vacant</i>
PREPA Officer	Executive Director (José Ortiz, Eng. )
PREPA Officer	Finance Director (Nelson Morales)
Consumer Interest	Agustín Irizarry, Ph.D.
Consumer Interest	Orlando Rodríguez, PE, CPA, Esq.
Consumer Interest	Roberto Volckers, PE.
Consumer Interest	Gilberto Dávila, CSA.
Consumer Interest	<i>Vacant</i>





Exhibit E: PREPA Management Presentation

## OVERVIEW OF PREPA NET

PREPA NET IS A DELAWARE LLC REGISTERED IN PUERTO RICO AS A FOREIGN ENTITY PROVIDING LOCAL AND INTERNATIONAL TELECOMMUNICATION SERVICES.

### Business Segments

- **International & Hub 787** – Connectivity services associated with the international submarine cable systems at the landing station in Isla Verde
  - PREPA Net can provide these services in Puerto Rico, Miami and New York
- **Optical Transport Services** – High capacity transport services offered over PREPA Net's fiber optic facilities
- **Special Facilities Services** – Provides bespoke services targeted at the needs of specific customers
  - Includes Small Cells for mobile network operators and a telemetry support solution for a public utility
- **Real Estate** – Leases available space in buildings and property that PREPA Net controls, including their headquarters and data center locations
  - Primary customers are companies that require access to high bandwidth telecom services

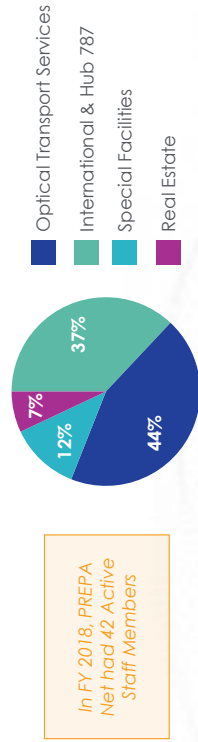
### Infrastructure & Leases

- PREPA Net's key technological infrastructure includes: submarine cable capacity and landing rights (Isla Verde Cable Station), the Hub 787 data center, and PREPA's island-wide fiber optic network
  - Fiber embedded within PREPA's T&D infrastructure
- PREPA Net has a 28-year Optical Telecommunications Infrastructure Lease Agreement that was originally executed in 2005, but was amended and renewed in 2017 to last through 2045
  - Lease covers all optical fiber cable capacity in PREPA's system
- PREPA Net also has a service agreement with PREPA to provide telecommunications services

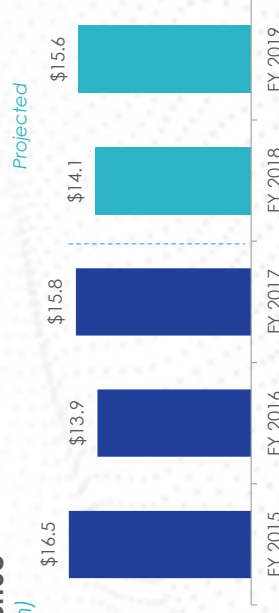
124 Note: The Financial Model does not incorporate PREPA Net into the projections.



### FY 2018 Revenue Contribution by Segment



### Revenue (\$mm)



### Net Cash Flow (\$mm)

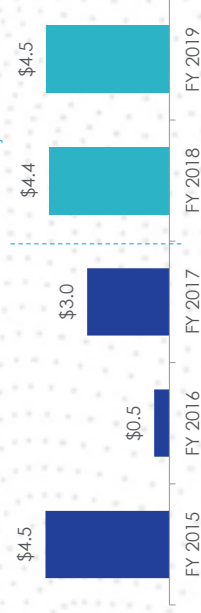






Exhibit E: PREPA Management Presentation

# Q&A





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## Exhibit F: Summary of O&M Agreement





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## SUMMARY OF OPERATION AND MAINTENANCE AGREEMENT FOR THE PUERTO RICO TRANSMISSION AND DISTRIBUTION SYSTEM

This summary of the principal terms and conditions of the operation and maintenance agreement for the Puerto Rico transmission and distribution system (the "**O&M Agreement**") is provided for convenience and should not be relied upon in lieu of the O&M Agreement. In the event of any conflict between this summary and the O&M Agreement, the O&M Agreement controls. Capitalized terms used in this summary and not otherwise defined herein have the meaning set forth in the O&M Agreement.

Term	Summary
<b>Parties</b>	The Puerto Rico Electric Power Authority (the " <b>Owner</b> "); The Puerto Rico Public-Private Partnerships Authority (the " <b>Administrator</b> "); LUMA Energy, LLC (" <b>ManagementCo</b> "), a limited liability company organized under the laws of Puerto Rico; and LUMA Energy ServCo, LLC (" <b>ServCo</b> " and, together with ManagementCo, " <b>Operator</b> "). <sup>1</sup>
<b>Purpose</b>	The O&M Agreement awards the right to provide (i) the services provided in order to manage, operate, maintain, repair and restore the transmission and distribution system (the " <b>T&amp;D System</b> "), commencing on the Service Commencement Date (all such services, the " <b>O&amp;M Services</b> "), (ii) the services provided prior to the Service Commencement Date in order to complete the transition and handover to Operator of the operation, management and other rights and responsibilities with respect to the T&D System pursuant to the O&M Agreement, including the services contemplated by the Front End Transition Plan (all such services, the " <b>Front-End Transition Services</b> ") and (iii) the services provided in order to complete the transition and handover of the O&M Services, and other rights and responsibilities with respect to the T&D System, back to Owner or to a successor operator upon the expiration or early termination of the Term, including the services contemplated by the Back End Transition Plan (all such services, the " <b>Back-End Transition Services</b> "), in each case, subject to the terms and conditions of the O&M Agreement. (§2.1)
<b>Effective Date</b>	The O&M Agreement becomes effective on the date it is executed by the Parties (the " <b>Effective Date</b> "), and includes the following conditions precedent to the Effective Date: (i) receipt by Parties of the approvals required under Act 120, in form and substance reasonably acceptable to Administrator and Operator; (ii) receipt by Owner of the Guarantee; (iii) receipt by Owner of a copy of a certificate as to certain matters of Commonwealth law duly executed by Operator; (iv) receipt by Owner of a Tax Opinion and receipt by Operator of a Reliance Letter; (v) evidence reasonably satisfactory to Operator that an amount equal to at least 4.5 months of the estimated Front-End Transitions Service Fee has been deposited by Owner in the Front-End Transition Account; and (vi) receipt by Operator of (A) a list of the project work sheets related to the T&D System prepared by FEMA pursuant to Section 428 of the Stafford Act as of such date or (B) a summary of the cost estimates or preliminary cost estimates for Federally Funded Capital Improvements established as of such date. (§2.2)

<sup>1</sup> Operator consists of both ServCo and ManagementCo. ManagementCo consists of the senior management personnel of Operator. ServCo is a subsidiary service company of ManagementCo. ManagementCo is not responsible for providing the O&M Services but is responsible solely for providing the Front End Transition Services. ServCo is responsible for providing the O&M Service, including employing the workforce that will provide the O&M Services, and is otherwise responsible for the T&D System. For purposes of this summary of the O&M Agreement, the term "Operator" is generally used to describe the rights and responsibilities of Operator, ManagementCo and ServCo. Refer to the O&M Agreement for specific application of these terms.



Term	Summary
<b>Front-End Transition Period and Service Commencement Date</b>	<ol style="list-style-type: none"> <li>1. Prior to the Service Commencement Date, Operator shall provide the Front-End Transition Services.<sup>2</sup> (§4.1)</li> <li>2. As compensation for the Front-End Transition Services, Owner or Administrator shall pay Operator an aggregate amount equal to (i) the hourly fully allocated cost rate for each category of Operator employee or Affiliate personnel providing Front End Transition Services, as set out in Annex V (<i>Front End Transition Hourly Fully Allocated Rates</i>); multiplied by (ii) the number of hours worked by each Operator employee or Affiliate personnel in such category providing Front End Transition Services; plus (iii) a fixed fee in the amount of US\$60,000,000. (§4.6)</li> <li>3. The “<b>Service Commencement Date</b>” is the date on which a handover to Operator of the O&amp;M Services occurs, which shall occur three (3) Business Days following the date on which Administrator confirms that all Service Commencement Date Conditions have been satisfied or waived. (§4.7(b))</li> </ol>
<b>Service Commencement Date Conditions</b>	<p>The “<b>Service Commencement Date Conditions</b>” include: (i) fulfillment by Operator of its obligations with respect to the Front End Transition Period under the O&amp;M Agreement (including (A) completion of the Front End Transition Plan and Handover Checklist, (B) confirmation of the Guarantee and the Required Insurance, (C) preparation and submission of the Initial Budgets, and (D) interview and evaluation of candidates for employment at Operator); (ii) fulfillment by Owner and Administrator of their respective obligations with respect to the Front-End Transition Period under the O&amp;M Agreement (including (A) identification of System Contracts, (B) review the Initial Budgets, (C) completion of the Front-End Transition Plan and (D) pre-funding of the Service Accounts); (iii) issuance of all Commencement Date Governmental Approvals; (iv) acceptability and effectiveness of documents and instruments identified in Article 4 (<i>Front-End Transition Period</i>); (v) no Governmental Body having enacted or enforced any Applicable Law, and no injunction being in effect, that would make it illegal for, or prohibit or enjoin, any Party’s performance of its obligations under the O&amp;M Agreement; (vi) preparation by a qualified environmental consultant of a Baseline Environmental Study; (vii) approval by PREB of the Initial Budgets (including any amendment thereto) and issuance by PREB of a Rate Order sufficient to fund the Initial Budgets; (viii) finalization or approval by PREB of the proposed revised Performance Metrics; (ix) provision by Owner of evidence reasonably satisfactory to Operator that the anticipated, or shall have access to, adequate funding for Capital Costs – Federally Funded for the first three (3) years of the Term is available; (x) finalization and approval of the Federal Funding Procurement Manual; (xi) approval by PREB of the System Remediation Plan and the System Operation Principles; (xii) in the event a Title III Plan has been confirmed providing for the Securitization SPV to issue new secured debt, receipt by Owner of a copy of the Servicing Contract; (xiii) issuance of the Tax Assurance; (xiv) agreement by Owner and Operator on the manner in which System Revenues will be allocated into one or more accounts of Owner to be managed by Operator; (xv) receipt by Owner of the Title III Approvals from the Title III Court reasonably acceptable to Operator; (xvi) approval and implementation by PREB of the Liability Waiver; (xvii) approval by the applicable Governmental Bodies of a final plan for the reorganization of PREPA into GenCo and GridCo; (xviii) mutual development and good faith negotiation of the Shared Services Agreement; (xix) execution of a protocol agreement among Operator, Administrator, Owner, and the FOMB, which shall (A) include provisions governing the FOMB’s interaction with the Parties with respect to the respective duties of the FOMB and Owner under PROMESA, which shall apply only during the period the FOMB is in existence and Owner is a covered territorial instrumentality pursuant to PROMESA, and (B) have a set of rules for the period during Title III and a separate set of rules triggered by the Title III Exit (the “<b>FOMB Protocol Agreement</b>”); and (xx) at the expense of Owner or Administrator, (A) receipt by Owner of a Tax Opinion and (B) receipt by Operator of a Reliance Letter (including all conditions to the delivery of such Reliance Letter to have been met). (§4.5)</p>

<sup>2</sup> Specifically, unless otherwise provided in the O&M Agreement, ManagementCo shall be responsible for providing the Front-End Transition Services.



Term	Summary
<b>Failure of Service Commencement Date Conditions</b>	<ol style="list-style-type: none"> <li>1. If (i) the Service Commencement Date does not occur by the date that is three (3) months following the Target Service Commencement Date or such later date as Administrator and Operator may agree, and (ii) the failure to of the Service Commencement Date to occur is not caused by any Force Majeure Event or Owner Fault, Operator shall pay to Owner Delay Liquidated Damages in the amount of US\$769,231 per week for each week the Target Service Commencement Date is delayed beyond such period, up to a maximum of US\$40,000,000. Operator shall not be required to pay Delay Liquidated Damages after the earlier of (A) the date on which the Operator Service Commencement Date Conditions are satisfied by Operator or waived by Administrator or (B) the date of termination of the O&amp;M Agreement for failure of the Service Commencement Date to occur. (§4.8(a))</li> <li>2. Administrator shall have the right, subject to approval by PREB, to terminate the O&amp;M Agreement if (i) any of the Operator Service Commencement Date Conditions are not satisfied by Operator or waived by Administrator by a date that is six (6) months following the Target Service Commencement Date or (ii) any of the Service Commencement Date Conditions are not satisfied or waived by each of Administrator and Operator by the date that is nine (9) months following the Target Service Commencement Date. (§4.8(b)(i) and §4.8(b)(iii))</li> <li>3. Operator shall have the right to terminate the O&amp;M Agreement if (i) all of the Operator Service Commencement Date Conditions are satisfied but any of the Owner Service Commencement Date Conditions are not satisfied by Owner or waived by Operator (unless such failure to satisfy the Owner Service Commencement Date Conditions is the result of the acts, omissions or breach of Operator) by the date that is six (6) months following the Target Service Commencement Date or (ii) any of the Service Commencement Date Conditions are not satisfied or waived by each of Administrator and Operator by the date that is nine (9) months following the Target Service Commencement Date. (§4.8(b)(ii) and §4.8(b)(iii))</li> <li>4. In the event of the termination of the O&amp;M Agreement for failure of the Service Commencement Date to occur, Operator shall (i) retain any Front-End Transition Service Fee earned as of the effective date of such termination, and shall within five (5) Business Days of the effective date of such termination, return to Administrator any amounts held in the Front-End Transition Account in excess of any earned Front-End Transition Service Fee and (ii) pay any accrued and unpaid Delay Liquidated Damages as of the effective date of such termination. (§4.8(b)(v))</li> <li>5. In addition to and notwithstanding anything to the contrary in Section 4.8(b) (<i>Failure of Service Commencement Date Conditions – Termination for Failure of Service Commencement Date Conditions</i>) of the O&amp;M Agreement, in the event the O&amp;M Agreement is terminated prior to the Service Commencement Date other than as a result of the acts, omissions or breach of Operator, (i) any balance of the Front-End Transition Service Fixed Fee then outstanding shall be deemed to have been earned and shall be paid in full to Operator and (ii) Operator shall be reimbursed for any reasonable and documented costs and expenses incurred by Operator (without markup for profit) that are necessary and reasonable in the course of terminating the activities undertaken in connection with the Front-End Transition Services, including reasonable and documented breakage fees for Front-End Subcontractors providing Front-End Transition Services. (§4.8(b)(vi))</li> </ol>
<b>Term</b>	15 years from the Service Commencement Date (the “ <b>Initial Term</b> ”) with option to extend for an additional period mutually agreed by Operator and Owner (or Administrator acting on Owner’s behalf) (the “ <b>Extension Term</b> ”), subject to (i) the maximum term permitted under Act 29 at the time of such extension, (ii) receipt of a Tax Opinion and a Reliance Letter in connection with such Extension Term and (iii) approval from PREB, to the extent required by Applicable Law. (§2.3)
<b>Ownership of the T&amp;D System</b>	The T&D System is and remains owned by PREPA throughout Term. Operator shall perform the O&M Services as independent contractor with no ownership or other interest in T&D System. (§3.1 and §3.2)



Term	Summary
<b>Qualified Management Contract</b>	<p>The Parties intend for the O&amp;M Agreement to constitute a "qualified management contract" under Revenue Procedure 2017-13, such that the provision of O&amp;M Services by Operator under the O&amp;M Agreement does not adversely affect the exclusion from gross income for federal income tax purposes under the Internal Revenue Code of the interest on such obligations. If the O&amp;M Agreement is determined to fail the requirements to comply with the requirements of Revenue Procedure 2017-13 for tax exempt status, the Parties agree to use reasonable efforts to amend the O&amp;M Agreement to comply with such requirements; <u>provided</u> that if any such amendment shortens or has the effect of shortening the Initial Term, including if any such amendment is required to secure the delivery of the Tax Opinion required by Section 4.5(v) (<i>Conditions Precedent to Service Commencement Date – Tax Opinion</i>), then: (i) the fixed fee component of the service fee payable to Operator (the "<b>Fixed Fee</b>") shall be adjusted by adding US\$7,000,000 in 2020 Dollars per month to each month for that number of months equal to the number of months by which the Initial Term is less than fifteen (15) years counting back from the end of the as-amended Initial Term; and (ii) the maximum amount for the incentive fee component of the service fee payable to Operator (the "<b>Incentive Fee</b>") shall be adjusted by adding US\$1,333,333 in 2020 Dollars per month to each month for that number of months equal to the number of months by which the Initial Term is less than fifteen (15) years counting back from the end of the as-amended Initial Term. Such adjustments to the Fixed Fee and the Incentive Fee shall not apply if the Initial Term is subsequently extended, which Initial Term shall automatically be extended if the Initial Term has been shortened to comply with the requirements of Revenue Procedure 2017-13 for tax exempt status and the Parties receive, at the expense of Owner or Administrator, (A) an opinion of Sargent and Lundy or other nationally recognized engineering firm acceptable to the Parties, which sets forth, among other things, the reasonably expected weighted average economic life of the T&amp;D System as of the date of that opinion, (B) an opinion of Nixon Peabody LLP as counsel to the FOMB or other nationally recognized tax counsel reasonably acceptable to Administrator, providing that the extension of the term of the O&amp;M Agreement to the original Initial Term does not adversely affect the exclusion from gross income of interest on tax-exempt obligations of the Owner for federal income tax purposes under Section 103 of the Internal Revenue Code, and (C) a Reliance Letter from such tax counsel accompanying the opinion described in clause (B). (§3.9)</p>
<b>Administrative Expense Treatment</b>	<ol style="list-style-type: none"> <li>1. No later than ten (10) Business Days after the Effective Date, Owner shall file a motion with the Title III Court seeking administrative expense treatment for any accrued and unpaid amounts required to be paid by Owner under the O&amp;M Agreement during the Front-End Transition Period, including the Front-End Transition Service Fee. (§4.1(c)(i))</li> <li>2. Operator shall have the right to terminate the O&amp;M Agreement (i) if such motion has not been approved by the Title III Court on or before the date that is ninety (90) days following the date on which such motion is filed, which ninety (90) day period may be extended for an additional forty-five (45) days by Administrator at its sole discretion or (ii) if such approval has been reversed on appeal. (§4.1(c)(ii))</li> </ol>
<b>System Remediation Plan</b>	<ol style="list-style-type: none"> <li>1. The Parties acknowledge and agree that (i) certain components of the T&amp;D System and the manner in which the T&amp;D System is operated do not currently meet the standards of performance required under the O&amp;M Agreement and (ii) a period of review, planning, remediation, repair and replacement will be required to enable Operator to achieve the Contract Standards. (§4.1(d)(i))</li> <li>2. The Parties shall develop a plan to remediate, repair, replace and stabilize such equipment, systems and services (the "<b>System Remediation Plan</b>") detailing the scope, resources, timelines, milestones, costs estimates and achievement criteria for each activity or project required to enable Operator to perform the O&amp;M Services in compliance with Contract Standards. The proposed System Remediation Plan shall be subject to approval by PREB as a condition precedent to the Service Commencement Date. (§4.1(d)(ii) and §4.1(d)(iii))</li> </ol>



Term	Summary
<b>Scope of O&amp;M Services</b>	<p>The O&amp;M Agreement provides a list of operational and legal services to be performed by Operator, excluding the GenCo Shared Services but including: (i) administering System Contracts; (ii) providing billing and collection services; (iii) implementing the System Remediation Plan; (iv) recommending and performing Capital Improvements; (v) representing Owner before PREB and preparing related filings and submissions, including proposed Integrated Resource Plans and rate change proposals; (vi) providing ServCo Benefit Plans; (vii) procuring and administering Federal Funding; (viii) performing other accounting, financial IT and generation-related services; and (ix) assisting Owner in fulfilling any obligations under Applicable Law, including obligations (A) with respect to PREB, (B) with respect to the FOMB under PROMESA and (C) agreements that Owner or its Affiliates are a party to. The Parties acknowledge that Operator's obligations to provide O&amp;M Services under the O&amp;M Agreement are subject to the System Remediation Plan. (Article 5 and Annex I (Scope of Services))</p>
<b>Rights and Responsibilities of Owner</b>	<p>From and after the Service Commencement Date, Owner shall (among other things): (i) grant Operator access to the T&amp;D System; (ii) pay the Service Fee and any other amounts due to Operator and fund the Service Accounts; (iii) ensure that, to the extent PROMESA requires Owner to submit any budget to the FOMB for approval, such budget provides that Owner is authorized to pay amounts due to Operator under the O&amp;M Agreement and fund the Service Accounts; (iv) cooperate with Operator such that the budgets and funds in support of O&amp;M Services are sufficient in amount to enable Operator to meet the Contracts Standards and provide a reasonable opportunity for Operator to achieve the Performance Metrics; (v) respond promptly to requests for approval, review or consent of Owner or for information of Owner; (vi) except in certain circumstances, manage Owner's legal matters; (vii) cooperate with Operator and Administrator in obtaining and maintaining all Governmental Approvals; (viii) audit Operator's compliance with Federal Funding Requirements; (ix) ensure that Operator remains a beneficiary to all Easements vested on Owner, and execute and file reasonably requested condemnation proceedings with respect to certain property interests; and (x) to the extent reasonably requested by Operator, and to the extent consistent with Applicable Law, cooperate with Operator in its efforts to obtain and effectuate approvals of any Governmental Body having competent jurisdiction for the establishment of measures to prevent erosion of revenue associated with the T&amp;D System or to enhance System Revenues. (§6.1)</p>



Term	Summary
<b>Rights and Responsibilities of Administrator</b>	<p>Administrator shall be responsible for overseeing, in the manner provided for and subject to the terms and conditions of the O&amp;M Agreement, Operator's performance of the O&amp;M Services under the O&amp;M Agreement. In particular, from and after the Service Commencement Date, Administrator shall: (i) have the right to review and approve Budgets for a given Contract Year, including modifications thereto, to ensure compliance with a Rate Order; (ii) have the right to review and approve the Incentive Fee payable to Operator for a given Contract Year, including based on Administrator's evaluation of Operator's satisfaction of the Performance Metrics; (iii) cooperate with Operator such that the budgets and funds in support of O&amp;M Services are sufficient in amount to enable Operator to meet the Contracts Standards and provide a reasonable opportunity for Operator to achieve the Performance Metrics; (iv) the right to exercise Oversight in relation to Operator's compliance with Budgets, including T&amp;D Pass Through Expenditures and Generation Pass-Through Expenditures, in accordance with the procedures set forth in the O&amp;M Agreement (provided that Administrator shall (A) reasonably coordinate with Owner to avoid duplicative Oversight and (B) except to the extent provided under the O&amp;M Agreement, avoid exercising Oversight with respect to items that fall within the scope of PREB's statutory oversight); (v) the right to exercise Oversight in relation to Operator's performance of its obligations under the O&amp;M Agreement, including performance of the O&amp;M Services; (vi) the right to exercise Oversight, as agent of Owner, in relation to Operator's compliance with Federal Funding Requirements; (vii) the responsibility to respond promptly (and in any event within thirty (30) days or shorter period required by the O&amp;M Agreement) to all requests of Operator with respect to matters requiring the approval, review or consent of Administrator (and in each such case, unless otherwise specifically stated in the O&amp;M Agreement, Administrator shall not unreasonably withhold, delay or condition any such approval, review or consent) and as to such other matters relating to the obligations of Operator in respect of which Operator shall reasonably request the response of Administrator in accordance with the provisions of the O&amp;M Agreement; (viii) the responsibility to (A) cooperate with Operator by providing Operator such information, data and assistance as may be reasonably necessary for Operator to perform its obligations and (B) from time to time, as and when requested by Owner, execute and deliver, or cause to be executed and delivered, all such documents and instruments and take, or cause to be taken, all such reasonable actions, as necessary for Operator to perform its obligations under the O&amp;M Agreement; (ix) the right to declare an Event of Default and exercise remedies under the O&amp;M Agreement, including termination of the O&amp;M Agreement upon the occurrence of an Operator Event of Default; (x) the responsibility to coordinate any Audits that Administrator is entitled to perform under the O&amp;M Agreement with any Audits being undertaken by Owner and any other Governmental Body that has the right under Applicable Law to perform an Audit; and (xi) to the extent reasonably requested by Operator, and to the extent consistent with Applicable Law, the responsibility to cooperate with Operator in its efforts to obtain and effectuate approvals of any Governmental Body having competent jurisdiction for the establishment of measures to prevent erosion of revenue associated with the T&amp;D System or to enhance System Revenues, including attending at meetings with appropriate officials of Governmental Bodies as may be reasonably requested by Operator for such purposes, identifying historical and potential governmental and quasi governmental measures relevant to such purposes, and providing other cooperation, as may be reasonably requested by Operator, in pursuit of such purposes. (§6.2)</p>
<b>Staffing Levels</b>	<p>From and after the Service Commencement Date and at all times during the Term, Owner and Administrator shall maintain staffing in connection with the O&amp;M Services only at those levels strictly necessary for Owner and Administrator to timely and efficiently perform their obligations under the O&amp;M Agreement. Before the Service Commencement Date, Owner shall maintain staffing necessary to continue to perform its obligations at the same or higher level than it performed such obligations as of the Proposal Submission Date. (§6.4)</p>





Term	Summary
<b>Operator Compensation</b>	<ol style="list-style-type: none"> <li>1. Owner shall pay Operator a management service fee consisting of (i) the Fixed Fee and (ii) an Incentive Fee based on Operator's ability to timely achieve or exceed the Performance Metrics (collectively, the "<b>Service Fee</b>"). (§7.1)</li> <li>2. The Parties acknowledge and agree that certain costs and expenses shall be paid by Operator from the Fixed Fee (or otherwise absorbed or paid for by Operator without reimbursement hereunder). Annex VII (<i>ManagementCo Costs</i>) to the O&amp;M Agreement provides a list of the costs and expenses to be paid for by Operator. In addition, no Federal Funding shall be used to pay the Service Fee. (§7.1)</li> </ol>
<b>Pass-Through Expenditures</b>	<ol style="list-style-type: none"> <li>1. Operator shall be reimbursed for (i) the costs and expenses (without markup for profit) incurred by Operator in the course of providing the O&amp;M Services, excluding Disallowed Costs (the "<b>T&amp;D Pass-Through Expenditures</b>")<sup>3</sup> and (ii) the costs and expenses (without markup for profit) incurred by Owner in the course of providing Power and Electricity, including the costs and expenses under the GridCo-GenCo PPOA and Generation Supply Contracts (the "<b>Generation Pass-Through Expenditures</b>"). (§7.2)</li> <li>2. A "<b>Disallowed Cost</b>" shall be (i) any and all T&amp;D Pass-Through Expenditures, Capital Costs, Outage Event Costs or Excess Expenditures incurred as a result of Operator's negligence (including gross negligence) or willful misconduct, except in connection with Section 5.10 (<i>Environmental, Health and Safety Matters</i>) where the applicable standard shall be gross negligence or willful misconduct to the extent provided therein, (ii) any and all fines, penalties or other similar payments or charges imposed by PREB on Operator, except to the extent Operator is performing its obligations under the O&amp;M Agreement in accordance with the O&amp;M Agreement, and (iii) other than as a result of Owner Fault, any and all Losses resulting from a denial by FEMA, HUD or a similar Governmental Body (such as COR3 or PRDH) of reimbursement of all or a portion of Capital Costs – Federally Funded on the grounds that actions taken by Operator were in violation of any Federal Funding Requirements, which denial becomes final, except that any Capital Costs – Federally Funded that were incurred in accordance with the Federal Funding Procurement Manual or approved by FEMA shall not be treated as a Disallowed Cost. (§7.6)</li> </ol>

<sup>3</sup> T&D Pass-Through Expenditures shall also include, without limitation, the items listed in Annex X (*T&D Pass-Through Expenditures*) to the O&M Agreement.



Term	Summary
<b>Budgets</b>	<p>1. As soon as practicable following the Effective Date, Operator shall prepare and submit to Administrator the proposed Initial Budgets; <u>provided</u> that for purposes of the Generation Budget, Operator shall only be required to submit (if received by Operator) the Generation Budget as prepared by Owner and delivered to Operator by Owner. Administrator, acting reasonably, shall provide Operator comments on the appropriateness of the proposed Initial Budgets and recommend any changes or modifications it believes are necessary or appropriate. Operator shall submit for PREB's review the revised Initial Budgets, incorporating or rejecting any of the modifications or changes suggested by Administrator, together with an explanation of any of Administrator's comments, as Operator shall reasonably deem appropriate in its sole discretion. PREB shall review, and approve, deny or propose modifications to, such proposed Initial Budgets in accordance with Applicable Law. Operator shall be required to respond promptly to any changes or modifications from PREB to the proposed Initial Budgets and submit any updates to the proposed Initial Budgets to PREB for its approval. If PREB does not respond within ninety (90) days after receipt of the proposed Initial Budgets or any update thereto, Operator may proceed for purposes of the O&amp;M Agreement as if PREB had approved such proposed Initial Budgets. (§4.2(e))</p> <p>2. For any Contract Year other than (i) the initial Contract Year, for which the procedures for the Initial Budgets shall apply, or (ii) a year in which a rate adjustment approved by PREB enters into effect, in which case the Budgets used in connection with obtaining such rate adjustment shall be used, Operator shall submit to Administrator the proposed Budgets for such Contract Year; <u>provided</u> that if any proposed Budget requires a rate adjustment to be approved by PREB, Operator shall have the right, at its sole discretion, to submit the proposed Budgets for such Contract Year directly to PREB rather than to Administrator. Owner shall prepare and deliver to Operator the Generation Budget for consolidation with the Operating Budget and the Capital Budgets submitted to Administrator. Administrator shall review such proposed Budgets to ensure compliance with the applicable Rate Order and the O&amp;M Agreement and shall notify Operator whether the proposed Budgets are compliant or request any changes or modifications to the proposed Budgets to conform the proposed Budgets with the applicable Rate Order and the O&amp;M Agreement. Administrator and Operator shall collaborate in good faith to resolve any differences with respect to such proposed Budgets as promptly as practicable. (§7.3(a))</p>
<b>Excess Expenditures</b>	<p>Each Budget shall include up to a maximum of two percent (2%) in excess of the total amount for excess expenditures that may arise in any Contract Year ("<b>Excess Expenditures</b>"); <u>provided</u> that such Excess Expenditures shall at all times be otherwise compliant with the applicable Rate Order. Any Excess Expenditure incurred by Operator during a Contract Year shall be treated as T&amp;D Pass-Through Expenditures and as if initially budgeted for such Contract Year. (§7.3(b))</p>
<b>Flexibility to Reallocate</b>	<p>Operator shall have complete flexibility, subject to compliance with the Contract Standards and prior consultation with, but not subject to approval by, Administrator or PREB, to (i) reallocate, accelerate or postpone expenditures within the approved Operating Budget, (ii) reallocate, accelerate or postpone expenditures within the approved Capital Budget – Federally Funded, subject to the Federal Funding Requirements, and (iii) reallocate, accelerate or postpone expenditures within the approved Capital Budget – Non-Federally Funded, in each case, (A) in order to address changed operational or commercial circumstances or new legal or regulatory requirements and (B) in such a manner that the reallocations do not exceed five percent (5%) of the Budget in which such reallocations are made or the expenditures are not postponed for a period longer than one (1) year. Any such reallocated amounts shall be treated as if initially budgeted in the Budget in which such reallocations are made in all respects, including with respect to the associated Performance Metrics. (§7.3(c))</p>



Term	Summary
<b>Amendments to Budgets</b>	<ol style="list-style-type: none"> <li>1. Operator may, from time to time, propose to amend the approved Operating Budget and Capital Budget for a given Contract Year, including to account for any for Federally Funded Capital Improvements that have been Obligated since the date the Capital Budget – Federally Funded then in effect was approved; <u>provided</u> that any such amendment shall be compliant with the applicable Rate Order. (§7.3(e))</li> <li>2. If, during a Contract Year, Operator becomes aware that T&amp;D Pass-Through Expenditures or Generation Pass-Through Expenditures for such Contract Year are expected to exceed a Budget for such Contract Year (taking into account the allowances for Excess Expenditures), then (i) with respect to the Operating Budget and Capital Budget, Operator shall promptly notify PREB and Administrator and prepare and submit to PREB a proposed amended Operating Budget or Capital Budget for such Contract Year, as the case may be, which amendment shall require and be subject to approval by PREB, and (ii) with respect to the Generation Budget, (A) Operator shall notify PREB, Administrator and Owner and (B) Owner shall, as promptly as practical, prepare and submit to PREB a proposed amended Generation Budget, which amendment shall require and be subject to approval by PREB. (§7.3(e))</li> </ol>
<b>Budget Policy</b>	<p>The Budgets and the related ServCo staffing levels for each Contract Year shall be designed to be adequate in both scope and amounts to reasonably assure that Operator is able to carry out the related O&amp;M Services in accordance with the Contract Standards and have a reasonable opportunity to earn the Incentive Fee for achieving the Performance Metrics. The Parties further acknowledge and agree that, from time to time, it may be necessary or appropriate to amend or otherwise adjust the Performance Metrics or the Budgets as a result of (i) Force Majeure Events, (ii) Owner Fault, (iii) Outage Events or (iv) additional requirements imposed by Owner, Administrator or any other Governmental Body after approval of the Budgets, in the case of each of clauses (i) to (iv), which (A) have resulted (or are reasonably likely to result) in schedule delays or increased work scope or costs and (B) are not attributable to Operator's gross negligence or willful misconduct. Operator shall provide notice to Administrator and PREB promptly following the occurrence of an event contemplated above and the Parties shall, in good faith and acting reasonably, consider necessary adjustments to the Performance Metrics or the Budgets that are based on rates that are reasonable and customary. (§7.4)</p>



Term	Summary
<b>Service Accounts – Operating and Capital Accounts</b>	<ol style="list-style-type: none"> <li>1. Owner shall establish one or more operating accounts from which Operator shall draw funds from time to time to pay for T&amp;D Pass Through Expenditures actually incurred by Operator in performing the O&amp;M Services and from which Owner shall pay the Service Fee (collectively, the <b>"Operating Account"</b>). Prior to the Service Commencement Date, Owner shall fund the Operating Account with an amount equal to the sum of (i) anticipated T&amp;D Pass-Through Expenditures for the following four and a half (4.5) months based on the then-currently approved Operating Budget or the relevant Default Budget then in effect <i>plus</i> (ii) the anticipated Service Fee for the following four and a half (4.5) months. Thereafter, Owner shall replenish the Operating Account so as to maintain the corresponding funding level. Except under circumstances specified in the O&amp;M Agreement, Operator shall not withdraw funds from the Operating Account for T&amp;D Pass Through Expenditures that are not included in the then-currently approved Operating Budget or the relevant Default Budget then in effect. (§7.5(a))</li> <li>2. Owner shall establish one or more capital accounts from which Owner shall draw funds from time to time, in accordance with the Federal Funding Procurement Manual, to pay Operator, as agent of Owner, for the cost of Federally Funded Capital Improvements related to the O&amp;M Services (the <b>"Capital Account – Federally Funded"</b>). Prior to the Service Commencement Date, Owner shall fund the Capital Account – Federally Funded with any or both of (i) Federal Funding received for the T&amp;D System and (ii) proceeds from any other financings or funds of Owner the use of which are designated for Capital Costs – Federally Funded. Thereafter, Owner shall replenish the Capital Account – Federally Funded so as to maintain the corresponding funding level. (§7.5(b))</li> <li>3. Owner shall establish one or more capital accounts from which Operator shall draw funds, from time to time, to pay for Capital Costs – Non Federally Funded related to the O&amp;M Services (collectively, the <b>"Capital Account – Non-Federally Funded"</b>). Prior to the Service Commencement Date, Owner shall fund the Capital Account – Non-Federally Funded with any or both of (i) proceeds from draws on financing provided by Operator or its Affiliates, on terms to be agreed on by Operator and Owner and (ii) proceeds from any other financings or any funds of Owner the use of which are designated for Capital Costs – Non-Federally Funded. Thereafter, Owner shall replenish the Capital Account – Non-Federally Funded so as to maintain the corresponding funding level. Except under circumstances specified in the O&amp;M Agreement, Operator shall not withdraw funds from the Capital Account – Non-Federally Funded for Capital Costs Non-Federally Funded that are not included in the then-currently approved Capital Budget – Non-Federally Funded or the relevant Default Budget then in effect. (§7.5(c))</li> </ol>
<b>Service Accounts – Outage Event Reserve Account</b>	<p>Owner shall establish one or more Outage Event Reserve Accounts from which Operator shall draw funds from time to time to pay for costs in connection with an Outage Event incurred by Operator (collectively, the <b>"Outage Event Reserve Account"</b>). Prior to the Service Commencement Date, Owner shall fund the Outage Event Reserve Account with an amount equal to US\$30,000,000. Promptly following a withdrawal, Owner shall replenish the Outage Event Reserve Account so as to maintain an amount equal to US\$30,000,000. (§7.5(d))</p>



Term	Summary
<b>Service Accounts – Generation Expenditures Accounts</b>	<p>Owner shall establish one or more generation expenditures accounts from which Operator shall draw funds from time to time to pay for actual Generation Pass Through Expenditures, including: (i) a Purchased Power Account from which Operator shall draw funds from time to time to pay for operation and management expenses incurred in connection with the GridCo-GenCo PPOA, any expenses incurred in connection with the Shared Services Agreement and any expenses incurred in connection with the Generation Supply Contracts, as applicable (the "<b>Purchased Power Account</b>"); and (ii) a Fuel Account from which Operator shall from time to time pay fuel supply expenses incurred in connection with the GridCo-GenCo PPOA and expenses incurred in connection with any fuel supply arrangement between GridCo and GenCo, as applicable (the "<b>Fuel Account</b>," and together with the Purchased Power Account and any other generation expenditure accounts, the "<b>Generation Expenditures Accounts</b>"). Prior to the Service Commencement Date, Owner shall fund the Purchased Power Account with an amount equal to anticipated, applicable Generation Pass-Through Expenditures for the following two (2) months, based on the then-currently approved Generation Budget or the relevant Default Budget then in effect. Thereafter, Owner shall replenish the Purchased Power Account so as to maintain the corresponding funding level. Owner shall fund the Fuel Account with an amount to be determined in accordance with the minimum working capital level set forth under the GridCo-GenCo PPOA and any fuel supply arrangement between GridCo and GenCo, as applicable. Except under specified circumstances, Operator shall not withdraw funds from the Generation Expenditures Accounts for Generation Pass Through Expenditures that are not included in the then-currently approved Operating Budget or the relevant Default Budget then in effect. Except under circumstances specified in the O&amp;M Agreement, Operator shall not withdraw funds from the Generation Expenditures Account for Generation Pass Through Expenditures that are not included in the then-currently approved Generation Budget or the relevant Default Budget then in effect. (§7.5(e))</p>
<b>Service Accounts – Contingency Reserve Account</b>	<p>Owner shall establish an account (the "<b>Contingency Reserve Account</b>") from which Operator shall be entitled to draw funds from time to time in the event that at any time during the Term there are insufficient funds in the Operating Account, Capital Account – Federally Funded, Capital Account – Non-Federally Funded, Outage Event Reserve Account or Generation Expenditures Accounts to pay for T&amp;D Pass-Through Expenditures, Capital Costs, Outage Event Costs or Generation Pass-Through Expenditures (any such event, a "<b>Funding Shortage</b>"). No later than ten (10) Business Days prior to the Service Commencement Date, Owner shall fund the Contingency Reserve Account with an amount equal to the average anticipated T&amp;D Pass-Through Expenditures for one and a half (1.5) months in the initial Contract Year, as determined based on the initial Operating Budget (the "<b>Contingency Reserve Amount</b>"). Thereafter, Owner shall (i) fund the account with a monthly amount equal to 1/24 of the Contingency Reserve Amount, beginning in the month in which the Service Commencement Date occurs until such time as the Contingency Reserve Account is funded to the level of the Contingency Reserve Amount, and (ii) in the event that Operator withdraws funds from the account, replenish the account by depositing an amount equal to 1/24 of the Contingency Reserve Amount, beginning in the month following any such withdrawal and until such time as the Contingency Reserve Account is funded to the level of the Contingency Reserve Amount. (§7.5(f))</p>
<b>Unfunded Amounts</b>	<p>Operator shall have no obligation or responsibility to incur or pay any costs or make expenditures in providing the O&amp;M Services (other than Disallowed Costs) to the extent any of the Service Accounts do not contain sufficient funds to pay such costs and expenditures. To the extent sufficient funds are not available for withdrawal by Operator from the Service Accounts, the Front-End Transition Account or the Back-End Transition Account, as applicable, Operator shall take reasonable measures to maintain the continuity of the O&amp;M Services in accordance with the Contract Standards to the extent possible in the absence of its receipt of such sufficient funding. (§7.7)</p>



Term	Summary
<b>Owner Credit Rating</b>	<p>1. To the extent (i) any direct obligations of any Owner or any of its Affiliates or successors secured by System Revenues are assigned an Investment Grade Rating or (ii) any direct obligations of the Securitization SPV or its successors secured by System Revenues are assigned a rating of AA or the equivalent, in each case by two (2) or more of the Rating Agencies, then (A) the level of pre-funding required in the Front-End Transition Account, the Operating Account, the Capital Account – Federally Funded, the Capital Account – Non-Federally Funded, the Generation Expenditures Accounts and the Back-End Transition Account shall be reduced from four and a half (4.5) months to three (3) months and (B) there shall be no further obligation to deposit funds into the Contingency Reserve Account. Any funds that are released from any Service Account as a result of the operation of this Section shall, at Owner's sole discretion, be used for the repayment of existing debt of Owner, refunds to T&amp;D Customers or other similar purposes. (§7.8(a))</p> <p>2. If at any time, (i) any direct obligations of any Owner or any of its Affiliates or successors secured by System Revenues are downgraded from an Investment Grade Rating by any Rating Agency that had provided an Investment Grade Rating or (ii) any direct obligations of the Securitization SPV or its successors secured by System Revenues are downgraded from a rating of AA or the equivalent by any Rating Agency that had provided such rating (in each case, a "<b>Rating Downgrade</b>"), then (A) the level of pre-funding required in the Front-End Transition Account, the Operating Account, the Capital Account – Federally Funded, the Capital Account – Non-Federally Funded, the Generation Expenditures Accounts and the Back-End Transition Account shall be increased from three (3) months to four and a half (4.5) months and (B) the obligation to deposit funds into the Contingency Reserve Account shall be reinstated; <u>provided</u> that if Owner does not have sufficient funds to fund the Front-End Transition Account, the Service Accounts or the Back-End Transition Account in the required amount, the failure to so fund shall not constitute a default so long as the Front-End Transition Account, the Service Accounts and the Back-End Transition Account are topped up to the level at which it should be at any given point as soon as Owner has sufficient funds to do so and in any event within six (6) months of the date of the Rating Downgrade. (§7.8(b))</p>
<b>Administrator Costs</b>	Owner shall be solely responsible for all costs and expenses of Administrator in connection with the performance of Administrator's obligations under the O&M Agreement, and shall pay or reimburse Administrator promptly for any out-of-pocket or third-party costs and expenses. (§7.9)
<b>Credit Support</b>	Operator shall cause the Guarantee to be provided on or prior to the Effective Date and maintained thereafter throughout the Term. (§8.1)
<b>Compliance with Applicable Law</b>	Operator shall perform, and cause all Contractors and Subcontractors to perform, the O&M Services in accordance with Applicable Law. Operator shall provide written notice to Administrator if Operator violates, or becomes subject to any government or regulatory investigation in connection with the Anti-Corruption Laws or Sanctions. (§9.1 and §9.2)
<b>Insurance</b>	Operator shall maintain in effect, and cause any Contractor and Subcontractor performing any of the O&M Services to maintain in effect, for the benefit of Owner and Operator, as applicable, the insurance policies and limits of coverage specified in the O&M Agreement and such insurance policies (i) as may be required by Applicable Law and (ii) that a prudent Person in the business of operating and managing the T&D System would maintain (the " <b>Required Insurance</b> "). All Required Insurance shall be in a form reasonably acceptable to Administrator and shall only be issued by generally recognized financially responsible insurers that (A) are authorized to do business in the Commonwealth or are otherwise authorized or permitted by the Office of the Commissioner of Insurance of Puerto Rico and (B) at a minimum have a rating of A(VIII) or better by A.M. Best Company or an equivalent rating by another similarly recognized insurance rating agency (unless Administrator consents to waive this requirement). (§10.1)



Term	Summary
<b>Subcontractors and Contractors</b>	<ol style="list-style-type: none"> <li>Operator may engage Subcontractors and Contractors to perform the O&amp;M Services, subject to Section 11.1(c) (<i>Ability to Subcontract and Contract – Federally Funded Capital Improvements</i>) in the case of Federally Funded Capital Improvements. Operator's payment obligations under any Subcontract or Contract shall be a T&amp;D Pass-Through Expenditure, subject to certain exceptions.<sup>4</sup> (§11.1(a) and §11.1(b))</li> <li>Owner acknowledges and agrees that Operator may hire Contractors, as agents for and on behalf of Owner, to perform (i) any Federally Funded Capital Improvements and (ii) any Non-Federally Funded Capital Improvements; <u>provided</u> that (A) any Contracts related to the performance of any Federally Funded Capital Improvement shall comply with the Federal Funding Requirements, including the requirements described in the Federal Funding Procurement Manual and any competitive bidding processes required for the award of any such Contracts, and (B) any Contracts related to the performance of any Non-Federally Funded Capital Improvement shall comply with the Non-Federal Funding Procurement Manual. (§11.1(c) and §11.1(d))</li> </ol>
<b>Taxation</b>	<ol style="list-style-type: none"> <li>Owner shall be entitled to (i) deduct and withhold from any consideration payable to Operator under the O&amp;M Agreement such amounts as required under applicable Tax law and (ii) request any necessary Tax information from Operator. The Parties agree to cooperate in good faith to reduce or eliminate the amount of any applicable withholding Taxes. In the event any withholding Taxes are paid by Owner in respect of amounts payable to Operator, Owner shall use commercially reasonable efforts to provide Operator (A) receipts or other evidence of payment of such withholding taxes and (B) all informative statements required by Applicable Law. (§12.1)</li> <li>Operator and each of its subsidiaries shall (i) prepare and timely file Tax Returns required under Applicable Law and (ii) pay Taxes required under Applicable Law. (§12.2)</li> </ol>

<sup>4</sup> To the extent Operator elects to subcontract any service to be provided by ManagementCo between the Service Commencement Date and the expiration or early termination of the O&M Agreement, Operator's payment obligations under any Subcontract or Contract shall not be a T&D Pass-Through Expenditure and shall be paid by ManagementCo from the Fixed Fee.



Term	Summary
<b>Intellectual Property</b>	<ol style="list-style-type: none"> <li>1. Owner shall own all right, title and interest in and to all Intellectual Property, and derivatives thereof, first created or produced under the O&amp;M Agreement or otherwise arising in connection with the performance of the O&amp;M Services, Front End Transition Services or Back End Transition Services by Operator and its Affiliates and, to the extent the applicable third party contracts so provide, any of their Subcontractors. (§13.1)</li> <li>2. Operator and its Affiliates shall grant to Owner, and shall cause its Affiliates to grant to Owner, a perpetual, non exclusive, fully paid up, royalty free, worldwide license and sublicense, under Operator Intellectual Property and Subcontractor Intellectual Property, solely in connection with the T&amp;D System and related facilities and their related operations (including the O&amp;M Services) by or on behalf of Owner or any successors or operators thereto to (i) make, have made, use, sell, offer for sale, export or import any product, service or apparatus and practice any method, and (ii) use, reproduce, distribute, perform, display, execute and create derivative works in connection with any of the foregoing. (§13.1)</li> <li>3. Any and all written, recorded or oral System Information furnished or made available in connection with the O&amp;M Agreement, or that constitutes Work Product, shall be deemed "<b>Owner Confidential Information</b>". Work Product shall be deemed Owner Confidential Information with respect to which Operator shall be deemed to be the receiving Party and Owner shall be deemed to be the disclosing Party. "<b>Operator Confidential Information</b>" includes Confidential Information pertaining to Operator Intellectual Property, Contractor Intellectual Property or Subcontractor Intellectual Property, or to Operator's policies and strategies. Nothing in the O&amp;M Agreement shall prevent (i) Administrator from disclosing Owner Confidential Information in its sole discretion (<u>provided</u> that Administrator shall not disclose Operator Intellectual Property, to the extent constituting Confidential Information, unless specifically authorized) or (ii) Operator from disclosing Operator Confidential Information in its sole discretion (<u>provided</u> that Operator shall not disclose any Confidential Information derived from or embodying Owner Intellectual Property, to the extent confidential, unless specifically authorized). (§13.2)</li> <li>4. Operator shall comply with, and shall use commercially reasonable efforts to ensure that all Operator Related Parties and all Contractors and Subcontractors comply with the Data Security Plan, any other Contract Standards and all requirements of Applicable Law regarding data security, cyber security and information security in respect of the System Information and related Information Systems. Operator shall update the Data Security Plan from time to time to be consistent with industry standards. (§13.3)</li> </ol>



Term	Summary
<b>Termination for Events of Default by Operator</b>	<ol style="list-style-type: none"> <li>1. Administrator, subject to specified cure periods, may terminate the O&amp;M Agreement for certain events of default by Operator (each, an "<b>Operator Event of Default</b>"), including: (i) bankruptcy; (ii) failure to provide or maintain the Guarantee; (iii) failure to perform a material obligation, covenant, term or condition under the O&amp;M Agreement; (iv) failure to pay any undisputed amount required to be paid by Operator under the O&amp;M Agreement or by Guarantor under the Guarantee; (v) any representation or warranty of Operator under the O&amp;M Agreement shall have been proven to be false or inaccurate in any material respect when made and thereby materially and adversely affects the legality of the O&amp;M Agreement or the ability of Operator to carry out its obligations thereunder; (vi) failure to obtain or maintain the Required Insurance; (vii) a Change of Control of Operator that is not permitted by the O&amp;M Agreement; (viii) transfer of any portion of Operator's rights or obligations under the O&amp;M Agreement other than as permitted under the O&amp;M Agreement; (ix) (A) a violation of any of the provisions of Article 3.2 of Act 2 or (B) entry of a plea of <i>nolo contendere</i> with a court of competent jurisdiction with respect to any Applicable Law or Anti-Corruption Laws; and (x) failure to meet the Minimum Performance Threshold for any three (3) Key Performance Metrics during three (3) or more consecutive Contract Years and no such failure shall have been excused by a Force Majeure Event, an Outage Event or Owner Fault (a "<b>Minimum Performance Threshold Default</b>"). (§14.1)</li> <li>2. Upon the occurrence of an Operator Event of Default relating to (i) bankruptcy, (ii) a violation of Article 3.2 of Act 2 or (iii) entry of a plea of <i>nolo contendere</i> with a court of competent jurisdiction with respect to any Applicable Law or Anti Corruption Laws, the O&amp;M Agreement shall terminate immediately without further action by Administrator. (§14.2(a))</li> <li>3. Upon the occurrence of any other Operator Event of Default, Administrator may terminate the O&amp;M Agreement upon not less than one hundred twenty (120) days prior written notice to Operator, subject, to the extent required by Applicable Law, to the prior approval of PREB or the FOMB (if then in existence), without need for a court decision or arbitral award confirming Administrator's right to terminate, subject to certain additional conditions with respect to an Operator Event of Default relating to a Change of Control of Operator. (§14.2(b))</li> </ol>
<b>Termination for Events of Default by Owner</b>	<ol style="list-style-type: none"> <li>1. Operator, subject to specified cure periods, may terminate the O&amp;M Agreement for certain events of default by Owner (each, an "<b>Owner Event of Default</b>"), including: (i) bankruptcy (<u>provided</u> that the pursuit by creditors of Owner of relief from the automatic stay extant pursuant to section 362(a) of the Bankruptcy Code in the current Title III Case for the purpose of seeking appointment of a receiver under applicable law shall not constitute an Owner Event of Default unless and until any such receiver is duly appointed); (ii) failure to perform a material obligation, covenant, term or condition under the O&amp;M Agreement (including the obligation to keep System Revenues free and clear of Liens other than Liens specified in the Title III Plan and the related disclosure statement); (iii) failure to pay any undisputed Service Fee or other undisputed amount required to be paid by Owner to Operator under the O&amp;M Agreement; (iv) failure to fund the Front-End Transition Account or any Service Account in an amount equal to at least two-thirds (2/3) of the requisite funding for such Front-End Transition Account or Service Account; and (v) any representation or warranty of Owner under the O&amp;M Agreement shall have proven to be false or inaccurate in any material respect when made and thereby materially and adversely affects the legality of the O&amp;M Agreement or the ability of Operator to carry out its obligations thereunder. (§14.3)</li> <li>2. Upon the occurrence of an Owner Event of Default, Operator may terminate the O&amp;M Agreement upon not less than one hundred twenty (120) days prior written notice to Administrator, subject to certain additional conditions with respect to an Owner Event of Default relating to failure to fund the Front-End Transition Account or Service Account. Owner agrees the automatic stay extant in the Title III Case pursuant to section 362(a) of the Bankruptcy Code shall not apply to the exercise by Operator of its termination rights or other remedies under Section 14.4 (Termination for Owner Event of Default), Section 14.5 (Additional Termination Rights) or Section 14.6 (Remedies Upon Early Termination). (§14.4)</li> </ol>



Term	Summary
<b>Additional Termination Rights</b>	<ol style="list-style-type: none"> <li>1. The O&amp;M Agreement provides additional termination rights, subject to not less than one hundred twenty (120) days' prior written notice to the other Party, including: (i) termination by Administrator or Operator in the event ownership of the T&amp;D System is sold, transferred or assigned to a private entity; (ii) termination by Administrator or Operator in the event that a Force Majeure Event continues for a period in excess of eighteen (18) consecutive months and materially interferes with, delays or increases the cost of the O&amp;M Services; (iii) termination by Operator or Administrator if (A) Operator has performed the O&amp;M Services under a Default Budget with respect to an Operating Budget during three (3) or more consecutive Contract Years or (B) Administrator and Operator shall fail to agree on the Operating Budget, and such failure results in an Budget Dispute, during three (3) or more consecutive Contract Years; (iv) termination by Owner if Operator has exceeded, during three (3) or more consecutive Contract Years, the Operating Budget initially approved for a given Contract Year other than as a result of specified circumstances (an "<b>Operating Budget Overrun Default</b>"); and (v) termination by Operator in the event of a Change in Regulatory Law. (§14.5)</li> <li>2. In addition, the O&amp;M Agreement provides for termination by each of Administrator and Operator for failure to satisfy the Service Commencement Date Conditions. (§4.8(b) and §14.5)</li> </ol>
<b>Remedies Upon Early Termination</b>	<ol style="list-style-type: none"> <li>1. Upon the early termination of the O&amp;M Agreement, Owner shall pay Operator any accrued and unpaid amounts required to be paid by Owner under the O&amp;M Agreement as of the effective date of such termination. If Operator is performing the Back-End Transition Services when such termination occurs, Owner shall be responsible for payment of the Back-End Transition Service Fee. (§14.6(a) and §14.6(b))</li> <li>2. In the event the O&amp;M Agreement is (i) terminated, revoked, nullified, cancelled or otherwise rendered invalid by any duly enacted law of the Commonwealth, as determined by a final non-appealable judgment by a court of competent jurisdiction (a "<b>Contract Nullification or Cancellation</b>"), (ii) terminated by Operator or Administrator as a result of a T&amp;D System Sale or (iii) terminated by Operator as a result of a Change in Regulatory Law that has certain consequences specified in the O&amp;M Agreement, Owner shall pay Operator the Operator Termination Fee. The "<b>Operator Termination Fee</b>" is an amount equal to (i) the sum of the Fixed Fee and the maximum Incentive Fee (in each case in 2020 Dollars, as defined in Annex VIII (<i>Service Fee</i>)) for the Contract Year in which the O&amp;M Agreement is terminated <i>multiplied by</i> (ii) the multiplier applicable for such Contract Year as set forth in Annex XIII (<i>Operator Termination Fee Multiplier</i>). (§1.1 and §14.6(c)(i))</li> <li>3. In the event the O&amp;M Agreement is terminated by Administrator due to either (i) a Minimum Performance Threshold Default or (ii) an Operating Budget Overrun Default, Operator shall pay Owner the Owner Termination Fee. "<b>Owner Termination Fee</b>" shall mean: (a) during Contract Years one (1) through five (5), an amount equal to US\$20,000,000 in 2020 Dollars; and (b) during any subsequent Contract Year, an amount equal to US\$10,000,000 in 2020 Dollars. (§1.1 and §14.6(c)(ii))</li> </ol>



Term	Summary
<b>Dispute Resolution</b>	<ol style="list-style-type: none"> <li>1. Operator acknowledges and agrees that Administrator (or any Designated Person appointed by Administrator) shall be authorized to participate in or act for and on behalf of Owner in any Dispute Resolution Procedure. The Dispute Resolution Procedures set forth in the O&amp;M Agreement do not apply to any dispute between a Party and PREB, which disputes shall be subject to resolution in accordance with Applicable Law. In the event that Operator disagrees with a decision of PREB, nothing shall prejudice, limit or otherwise impair Operator's right to exercise its rights pursuant to Act No. 38 of June 30, 2017 and Section 6.5(c) of Act 57. (§15.1)</li> <li>2. The Parties agree to attempt to resolve any Dispute through good faith negotiations. If the Dispute remains unsolved with thirty (30) days after receipt of notice of such Dispute, (i) Technical Disputes shall be referred to arbitration by an Independent Expert for a final and binding determination and (ii) any other Dispute shall proceed to mediation and, if necessary, litigation in the Commonwealth Court of First Instance, San Juan Part for a final and binding determination. (§15.3)</li> <li>3. The Parties acknowledge and agree that, in connection with a proposed Budget or an amended Budget, Owner, Administrator and Operator shall have the right to present to PREB any Expert Technical Determination with respect to a Budget Dispute; provided that this shall in no way (i) limit PREB's right to approve, deny or propose modifications to such proposed or amended Budgets or (ii) otherwise affect PREB's statutory rights and responsibilities under Applicable Law. (§7.3(f))</li> </ol>
<b>Back-End Transition Period</b>	<ol style="list-style-type: none"> <li>1. Commencing on the Back-End Transition Commencement Date, in addition to providing the O&amp;M Services, Operator shall (i) provide the Back-End Transition Services, (ii) comply with the obligations set forth in Section 16.2(b) (<i>Back End Transition Services – Certain Obligations</i>), (iii) reasonably cooperate with Administrator during any procurement process to identify a successor operator and (iv) commence preparations for an orderly transition of ServCo and the T&amp;D System to Owner or Administrator (or their designee). (§16.2(a))</li> <li>2. Owner or Administrator shall pay Operator the Back-End Transition Service Fee as compensation for the Back-End Transition Services provided by Operator. (§16.4)</li> <li>3. Operator shall have no obligation to continue performing any Back-End Transition Services as of the earlier of (i) the date which is twelve (12) months following the expiration or early termination of the Term and (ii) the date on which there are no funds available in the Back-End Transition Account, without need for a court decision or arbitral award confirming Operator's right to terminate. (§16.2(c))</li> </ol>
<b>Transfer Obligation upon Expiration or Termination</b>	<p>Immediately upon the expiration or earlier termination of the O&amp;M Agreement, at Administrator's election, in its sole discretion, Operator shall transfer all the ownership interests in ServCo and all ServCo corporate books and records to Owner or, at Administrator's direction, its designee free and clear of all Liens and Administrator shall accept such transfer at no cost to Owner, Administrator or their designees. In addition, the Parties shall, immediately upon the expiration or earlier termination of the O&amp;M Agreement, implement any arrangements contemplated by the Back-End Transition Plan, including arrangements relating to (i) the possible hiring of ServCo Employees by a successor operator and (ii) the treatment of severance costs associated with any ServCo Employees not hired by a successor operator. (§16.3)</p>



Term	Summary
<b>Force Majeure Events</b>	<ol style="list-style-type: none"> <li>1. A <b>"Force Majeure Event"</b> shall be any act, event, circumstance or condition (other than lack of finances) whether affecting the T&amp;D System, the System Power Supply, Owner, Operator or any of Owner's Contractors or subcontractors or Operator's Subcontractors that (i) is beyond the reasonable control of and unforeseeable by, or which, if foreseeable, could not be avoided in whole or in part by the exercise of due diligence by, the Party relying on such act, event or condition as justification for not performing an obligation or complying with any condition required of such Party under the O&amp;M Agreement, and (ii) materially interferes with or materially increases the cost of performing such Party's obligations under the O&amp;M Agreement, to the extent that such act, event, circumstance or condition is not the result of the willful or negligent act, error or omission or breach of the O&amp;M Agreement by such Party. Notwithstanding anything to the contrary in the foregoing, the imposition of a Tax or an increase in Taxes that is the result of a revocation of the Tax Assurance or an amendment or other modification of the Tax Assurance that is materially adverse to Operator or its Equity Participants shall be deemed a Force Majeure Event. The O&amp;M Agreement provides (x) a list of acts, events or conditions that, subject to the requirements specified above, by way of example and without limitation, may constitute a Force Majeure Event and (y) a list of acts, events or conditions that shall not constitute a Force Majeure Event. (§1.1)</li> <li>2. If a Force Majeure Event interferes with, delays or increases the cost of a Party's performance of its obligations under the O&amp;M Agreement and such Party has given timely notice and description as required by the O&amp;M Agreement, such Party shall be excused from performance and any associated Events of Default, except to the extent a Force Majeure Event continues for a period in excess of one hundred twenty (120) days and Administrator and Operator negotiate in good faith to determine modifications to the Service Fee, Term or other provisions of the O&amp;M Agreement. In the event Operator is the party claiming the Force Majeure Event, Operator shall be (i) excused with respect to the achievement of any Performance Metrics affected by the Force Majeure Event and (ii) entitled to request appropriate adjustments to the Budgets or the Performance Metrics in accordance with the terms of the O&amp;M Agreement. (§17.2(a))</li> <li>3. In addition to all other relief pursuant to the O&amp;M Agreement, the occurrence of a Force Majeure Event shall not excuse or delay the performance of (i) a Party's obligation to pay amounts previously accrued and owing under the O&amp;M Agreement, including any earned and unpaid Service Fees, (ii) Owner's obligation to continue to pay the Fixed Fee and to deposit and make funds available for Operator's use in the Service Accounts in accordance with the O&amp;M Agreement and (iii) any obligation under the O&amp;M Agreement not affected by the occurrence of the Force Majeure Event. (§17.2(b))</li> </ol>



Term	Summary
<b>Indemnification</b>	<ol style="list-style-type: none"> <li>Operator shall indemnify, defend and hold harmless Owner, Administrator and their respective Affiliates and Representatives against any and all Losses arising or resulting from: (i) a breach by Operator of any representation or warranty of Operator in the O&amp;M Agreement that has a material adverse effect on the T&amp;D System or the cost of performance by any Party of its respective obligations thereunder or (ii) the negligence (including gross negligence) or willful misconduct of Operator Indemnitees in connection with the O&amp;M Agreement (except in connection with Section 5.10 (<i>Environmental Health and Safety Matters</i>) where the applicable standard shall be gross negligence or willful misconduct to the extent provided therein), in each case as determined by a final and non-appealable judgment by a court of competent jurisdiction. (§18.1)</li> <li>Owner shall indemnify, defend and hold harmless Operator and the Equity Participants and its and their Affiliates and Representatives against any and all Losses arising or resulting from: (i) any breach by Owner or Administrator of any of its respective representations or warranties in the O&amp;M Agreement that has a material adverse effect on the T&amp;D System or on the performance or the cost of performance by any Party of its respective obligations under the O&amp;M Agreement; (ii) any failure by Owner or Administrator to perform its obligations under the O&amp;M Agreement or resulting from any Owner Fault; (iii) claims of any nature relating to the T&amp;D System, Owner's operation thereof or any matter in the nature of the services to be provided by, or any other obligations imposed on, Operator hereunder, in each case based on events or circumstances to the extent arising prior to the Service Commencement Date or relating to Legacy Generation Assets, or any fiber optic cable infrastructure or other facilities, equipment and other assets related to telecommunications in which Owner or PREPA Networks, LLC has an ownership or leasehold interest (other than in connection with Operator's obligations under Section I.A(6) of Annex I (<i>Scope of Services</i>); (iv) the negligence (including gross negligence) or willful misconduct of Owner Indemnitees in connection with the O&amp;M Agreement; (v) claims brought by Owner employees or former employees with respect to the non-payment or underfunding of benefits under Owner's pension or other employee benefit plans; (vi) claims brought against Operator by a T&amp;D Customer in connection with the T&amp;D System or Operator's performance of the O&amp;M Services; (vii) claims brought against Operator by a Person not party to the O&amp;M Agreement in connection with the T&amp;D System or Operator's performance of the O&amp;M Services for loss of profits or revenues or special, exemplary, punitive, indirect or consequential damages, howsoever or whensoever arising and whether or not caused by the negligence of any Operator Indemnitee; or (viii) Pre-Existing Environmental Conditions, other than an exacerbation of such Pre-Existing Environmental Conditions to the extent caused by the gross negligence or willful misconduct of any Operator Indemnitee. (§18.2)</li> </ol>



Term	Summary
<b>Limitations on Liability</b>	<ol style="list-style-type: none"> <li>Any damages payable by Owner to Operator shall be limited to the amount equal to the lesser of (x) the Fixed Fee paid to Operator in the immediately preceding Contract Year <i>plus</i> the Incentive Fee earned by Operator in the immediately preceding Contract Year and (y) an amount equal to the net present value of the Fixed Fee payable over the remainder of the Term discounted at a rate of six percent (6%) <i>plus</i> the Incentive Fee earned by Operator in the immediately preceding Contract Year, except, in each case, for damages related to gross negligence or willful misconduct, which shall not be subject to any cap. (§14.6(d))</li> <li>Administrator shall not be liable to Operator Indemnitees under the O&amp;M Agreement. (§18.3(c))</li> <li>Except as set forth in Section 18.3(b) (<i>Limitation on Liability – Gross Negligence; Willful Misconduct</i>), Operator's liability to Owner Indemnitees under Section 18.1 (<i>Indemnification by Operator</i>), including Disallowed Costs, shall be limited to US\$35,000,000 in the aggregate for Losses occurring in any Contract Year and US\$105,000,000 in the aggregate for all Losses during the Term. (§18.3(a)(i))</li> <li>Operator's liability to Owner Indemnitees for any Losses attributable to any Operator Indemnitee's gross negligence or willful misconduct under the O&amp;M Agreement, including under Section 18.1 (<i>Indemnification by Operator</i>) and any Disallowed Costs attributable to Operator Indemnitees' gross negligence or willful misconduct, shall be limited to: (i) US\$35,000,000 for all Losses occurring in each Contract Year for each of the first five (5) Contract Years; (ii) US\$52,500,000 for all Losses occurring in each Contract Year for each subsequent Contract Year; and (iii) a total maximum of US\$105,000,000 in the aggregate for all Losses during the Term. (§18.3(b))</li> <li>Operator's liability to Owner Indemnitees shall be subject to the limitation on liability set forth in Section 18.3(a) (<i>Limitations on Liability – Operator General Limitations</i>) and limited as follows: (i) from the Effective Date until the end of the second (2nd) Contract Year, Operator shall not be liable for any Loss incurred by an Owner Indemnitee, unless and until the aggregate amount of such Losses in such Contract Year exceeds US\$5,000,000, in which event Operator shall then be liable for all Losses in excess of US\$5,000,000; and (ii) from the beginning of the third (3rd) Contract Year until the end of the Term, Operator shall not be liable for any Loss incurred by an Owner Indemnitee, unless and until the aggregate amount of such Losses in such Contract Year exceeds US\$2,500,000, in which event Operator shall then be liable for all Losses in excess of US\$2,500,000. (§18.3)</li> <li>Except as specified in Section 18.3(a) (<i>Limitation on Liability – Operator General Limitations</i>) and Section 18.3(b) (<i>Limitation on Liability – Gross Negligence, Willful Misconduct</i>) for the Losses specified in each such provision, in which event the caps specified in such sections shall apply, and except for the exclusive remedies set forth in the first sentence of Section 14.6(d) (<i>Remedies Upon Early Termination – Additional Remedies</i>), any Losses payable by Operator to Owner pursuant to the O&amp;M Agreement shall be limited to US\$10,000,000. (§14.6(d))</li> </ol>
<b>Amendments</b>	<p>Neither the O&amp;M Agreement nor any provision thereof may be changed, modified, amended or waived, except by written agreement duly executed by the Parties. Any such amendment shall not be effective until (i) to the extent required by Applicable Law, approved by PREB and the FOMB (if then in existence) and (ii) Administrator has obtained a Tax Opinion and a Reliance Letter, at the cost of Owner or Administrator, with respect to any such amendment. (§20.3)</p>
<b>Governing Law</b>	<p>The O&amp;M Agreement shall be interpreted, construed and governed by and in accordance with, and enforced pursuant to, the laws of the Commonwealth of Puerto Rico. (§20.15)</p>





# **Exhibit G: Summary of Supplemental Agreement**





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## SUMMARY OF SUPPLEMENTAL TERMS AGREEMENT FOR THE PUERTO RICO TRANSMISSION AND DISTRIBUTION SYSTEM

This summary of the principal terms and conditions of the supplemental terms agreement for the Puerto Rico transmission and distribution system (the "**Supplemental Agreement**") is provided for convenience and should not be relied upon in lieu of the Supplemental Agreement. In the event of any conflict between this summary and the Supplemental Agreement, the Supplemental Agreement controls. Capitalized terms used in this summary and not otherwise defined herein have the meaning set forth in the Supplemental Agreement, and any such capitalized terms used herein but not defined in the Supplemental Agreement shall have the respective meanings ascribed to them in the operation and maintenance agreement for the Puerto Rico transmission and distribution system (the "**O&M Agreement**"), as the same may be amended or supplemented by the Supplemental Agreement.

Term	Summary
<b>Parties</b>	The Puerto Rico Electric Power Authority (the " <b>Owner</b> "); The Puerto Rico Public-Private Partnerships Authority (the " <b>Administrator</b> "); LUMA Energy, LLC (" <b>ManagementCo</b> "), a limited liability company organized under the laws of Puerto Rico; and LUMA Energy ServCo, LLC (" <b>ServCo</b> " and, together with ManagementCo, " <b>Operator</b> "). <sup>1</sup>
<b>Effective Date</b>	<p>The Supplemental Agreement shall automatically become effective, without further action by the Parties, on the date on which all Service Commencement Date Conditions, except for the Title III Exit (i.e., the consummation and effectiveness of a confirmed Title III Plan) and delivery of the Tax Opinion and Reliance Letter required by Section 4.5(v) of the O&amp;M Agreement, have been satisfied or waived in accordance with the O&amp;M Agreement (the "<b>Supplemental Agreement Effective Date</b>"). (§2.2)</p> <p>If the Supplemental Agreement Effective Date does not occur, the Supplemental Agreement shall not become effective and shall be deemed void <i>ab initio</i> and terminated automatically without any further action by the Parties. (§2.2)</p>
<b>Term</b>	The Supplemental Agreement shall be in effect from the Supplemental Agreement Effective Date through the earlier of (a) the Service Commencement Date and (b) in the event that the Service Commencement Date does not occur on or prior to the date that is eighteen (18) months after the Supplemental Agreement Effective Date (such period of time, the " <b>Interim Period</b> "), unless earlier terminated in accordance with the terms of the Supplemental Agreement. (§2.4)

<sup>1</sup> Operator consists of both ServCo and ManagementCo. ManagementCo consists of the senior management personnel of Operator. ServCo is a subsidiary service company of ManagementCo. ManagementCo is not responsible for providing the O&M Services but is responsible solely for providing the Front End Transition Services. ServCo is responsible for providing the O&M Services, including employing the workforce that will provide the O&M Services, and is otherwise responsible for the T&D System. For purposes of this summary of the Supplemental Agreement, the term "Operator" is generally used to describe the rights and responsibilities of Operator, ManagementCo and ServCo. Refer to the Supplemental Agreement and the O&M Agreement for specific application of these terms.



Term	Summary
<b>Conditions Precedent to Operator Takeover of T&amp;D System</b>	<p>Operator shall take over operation of the T&amp;D System while Owner remains in Title III on the first (1st) Business Day of a calendar month that is at least three (3) Business Days following the date on which Administrator delivers a certificate to Operator confirming that the following conditions have been met to the satisfaction of each of Operator and Administrator (the “<b>Interim Period Service Commencement Date</b>”):</p> <ol style="list-style-type: none"> <li>1. The O&amp;M Agreement remains in full force and effect, subject to the Supplement Agreement. (§2.3(a))</li> <li>2. The Title III Court has entered, on a final and non-appealable basis, an order or orders (i) to the extent required by Applicable Law, authorizing Owner's entry into and performance of the Supplemental Agreement, and (ii) granting administrative expenses treatment for any amounts required to be paid by Owner under the Supplement Agreement and the O&amp;M Agreement during the Interim Period. (§2.3(b))</li> <li>3. A number of Owner Employees and Other Employees necessary for Operator to perform all services with respect to the T&amp;D System constituting O&amp;M Services under the O&amp;M Agreement commencing on the Interim Period Service Commencement Date (the “<b>Interim Period Services</b>”) have accepted offers to commence employment as ServCo Employees beginning on the Interim Period Service Commencement Date. (§2.3(c))</li> <li>4. Owner shall have provided Operator with written notice of the System Contracts and Generation Supply Contracts that have been assumed and those that have been rejected as of the Interim Period Service Commencement Date. (§2.3(d))</li> <li>5. All Service Accounts shall have been established, and all Service Accounts other than the Contingency Reserve Account shall have been funded, in each case as required by Section 4.7 (<i>Establishment and Funding of Service Account</i>). (§2.3(e))</li> <li>6. Owner shall have received a Supplemental Agreement Tax Opinion and ManagementCo shall have received a Supplemental Agreement Reliance Letter, at the expense of Owner or Administrator. (§2.3(f))</li> <li>7. All Service Commencement Date Conditions, other than delivery of the Tax Opinion and Reliance Letter required by Section 4.5(v) of the O&amp;M Agreement, shall have been satisfied after giving effect to the amendments to the O&amp;M Agreement set forth in the Supplemental Agreement. (§2.3(g))</li> </ol>
<b>Operator Compensation</b>	<p>As compensation for Operator's performance of the Interim Period Services, and solely for the duration of the Interim Period, Owner shall pay ManagementCo an annual fixed management service fee equal to \$115 million in 2020 Dollars, payable in monthly installments. (§3.3)</p>
<b>Operator's Title III Costs and Expenses</b>	<p>Owner is required to cover all costs and expenses of Operator in connection with PROMESA, the Title III Case or any other Legal Proceedings related thereto. (§3.4)</p> <p>All amounts payable by Owner to Operator hereunder and under the O&amp;M Agreement during the Interim Period shall be deemed to be administrative expenses of Owner. (§3.5)</p>





Term	Summary
<b>Adjustments to O&amp;M Agreement</b>	<p>Any amendments or supplements to the O&amp;M Agreement made in the Supplement Agreement shall be effective only during the Interim Period, provided that such amendments or supplements shall survive if the O&amp;M Agreement is terminated during the Interim Period. (§4.1)</p> <p>Defined Terms. Section 1.1 (<i>Definitions</i>) of the O&amp;M Agreement is amended by adding certain defined terms and amending certain defined terms.</p> <p>The Supplemental Agreement amends the O&amp;M Agreement by adding certain defined terms and amending certain defined terms, to provide that:</p> <ul style="list-style-type: none"> <li>• A Change in Law includes (i) any event or circumstance, or order or judgment of any Governmental Body, requiring Operator or any Operator Related Parties to become a party to any Legal Proceeding related to the Title III Case or if Operator commences or becomes a party to any action or contested matter in the Title III Case in order to protect its rights under the Supplemental Agreement and (ii) where arising out of the Title III Case, the delay or denial of any request to approve a Budget, Rate Order, or change in Performance Metrics or performance relief. (§4.2(b)(i-ii))</li> <li>• During the Interim Period, the Operator Termination Fee shall equal the Interim Period Service Fee. (§4.2(d))</li> <li>• Permitted Liens include (i) Liens to secure Postpetition Financing and (ii) Liens on System Revenues specified in or permitted under any Title III Plan and its related implementing documents, provided that in the case of each of clauses (i) and (ii), such Permitted Liens would not reasonably be expected to have a Material Adverse Effect on the rights of Operator under the O&amp;M Agreement or the ability of Owner or Operator to perform their respective obligations under the O&amp;M Agreement. (§4.2(e))</li> <li>• During the Interim Period, the Interim Period Service Fee shall be payable, subject to the terms and conditions of the Supplemental Agreement, in lieu of the Service Fee. (§4.2(f))</li> </ul> <p>The Supplemental Agreement makes the following amendments to the O&amp;M Agreement, among others:</p> <ul style="list-style-type: none"> <li>• If the Interim Period Service Commencement Date occurs prior to the expiration of the twelfth (12th) month following the Effective Date, then any balance of the Front-End Transition Service Fixed Fee then outstanding shall be paid in full to Operator on the Interim Period Service Commencement Date (rather than on the Service Commencement Date). (§4.5)</li> <li>• In the event of an early termination of the O&amp;M Agreement pursuant to the Supplemental Agreement, and if Operator is performing the Back-End Transition Services, Owner shall be responsible for payment of the Back-End Transition Service Fee. (§4.9(a)(i))</li> <li>• If the Back-End Transition Commencement Date occurs as a result of the termination of the O&amp;M Agreement pursuant to the Supplemental Agreement, Owner shall pay the Back-End Transition Service Fee monthly in advance on the first Business Day of each calendar month. (§4.9(b))</li> <li>• Owner shall indemnify Operator against all claims brought against Operator after the Interim Period Service Commencement Date by any creditor or other Person (A) in connection with or related to the Title III Case or (B) in connection with or arising out of the negotiation and execution of the Supplemental Agreement. (§4.10)</li> </ul>





Term	Summary
<b>Additional Operator Termination Rights</b>	<p>The Supplemental Agreement and the O&amp;M Agreement shall automatically terminate in the event that the Service Commencement Date does not occur on or prior to the date that 18 months after the Supplemental Agreement Effective Date, unless, if requested by Administrator, the term of the Supplemental Agreement is extended by the mutual agreement of the Parties. (§7.1(a))</p> <p>In addition, the Supplemental Agreement allows the Operator to terminate the Supplemental Agreement and the O&amp;M Agreement upon the occurrence of a Material Adverse Effect arising out of the Title III Case as a result of a filing in the Title III Case or a ruling or order of the Title III Court. (§7.1(b))</p> <p>In the event that, during the Interim Period, either Operator or Administrator exercise its rights to termination the O&amp;M Agreement pursuant to the terms thereof, the Supplemental Agreement shall terminate concurrently with the termination of the O&amp;M Agreement. (§7.1(c))</p>
<b>Remedies Upon Early Termination</b>	<p>Upon early termination of the Supplement Agreement, Owner is required to pay Operator (i) all accrued and unpaid amounts due under the Supplemental Agreement and the O&amp;M Agreement and (ii) if Operator is performing the Back-End Transition Services, Owner shall be responsible for payment of the Back-End Transition Service Fee. In addition, if the Supplemental Agreement terminates automatically, as described above, Owner is required to pay Operator the Operator Termination Fee. (§7.2)</p>





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